ALBERTA SUICIDE PREVENTION STRATEGY

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Executive Summary

Suicide in Alberta

Suicide is consistently a leading cause of death among Albertans. Suicide claims more lives annually than other more openly discussed issues such as motor vehicle collisions, AIDS or homicide. Historically, Alberta has generally had a higher suicide rate than the overall national rate (Alberta Centre for Injury Control and Research, 2000).

According to Alberta Mental Health Board (AMHB), in the 2001/02 fiscal year, 466 people in Alberta died by suicide. But suicide deaths are just the tip of the iceberg. For every death, there were nearly 6 hospitalizations and more than 15 emergency room visits for self-inflicted injuries in one year alone.

Background

In 2004, *Advancing the Mental Health Agenda: A Provincial Mental Health Plan for Alberta* (PMHP) was released (Alberta Mental Health Board, Provincial Mental Health Planning Project, 2004). The PMHP was developed through a partnership of relevant stakeholders. One of the significant recommendations was the call for AMHB to lead the development of a province-wide suicide prevention strategy which would serve as a framework to guide effective suicide prevention programs among provincial, regional and community stakeholders.

Initial planning work involved reviewing background information, research and other relevant strategies. In December 2004 AMHB held forums and met with interested stakeholders to discuss the development of the strategy and obtain input from across Alberta. A key recommendation was that a provincial group be created to guide the process.

The Alberta Suicide Prevention Strategy Working Group was established early in 2005 to create a strategy. The Working Group was comprised of survivors, service providers, researchers, representatives from relevant provincial and federal government departments, suicide- and mental health-related agencies, regional health authorities, and other individuals and groups with an interest in suicide prevention.

In May the Working Group circulated a draft *Alberta Suicide Prevention Strategy* to over 200 individuals and groups who were identified as having a stake in suicide prevention. More than 45 responses were received, reflecting the views of countless more since most responses were on the behalf of organizations, groups and committees. The Working Group reviewed the feedback and incorporated it into the final draft.

The *Alberta Suicide Prevention Strategy* will be supplemented by a comprehensive implementation plan to stimulate action across the province.

Overview of the *Alberta Suicide Prevention Strategy*

The purpose of the *Alberta Suicide Prevention Strategy* is to prevent and reduce suicide, suicidal behaviour, and the effects of suicide in Alberta over the next 10 years. The strategy will target a 19% reduction of the provincial suicide rate. This 19% rate reduction target was adopted from *Framework for a Healthy Alberta* (Alberta Health and Wellness, 2003) which aims for a reduction in the provincial rate from 15.2 to 12.3 per 100,000 population by 2012.

Suicide affects our entire society directly and indirectly. Key strategies and approaches which are aimed at the general population as well as targeted efforts for identified priority groups are essential to providing a comprehensive approach to suicide prevention to provide intermediate and long-term outcomes. During the development of the implementation plan for the *Alberta Suicide Prevention Strategy*, criteria for defining provincial priority groups will be developed. There may also be more specific local priority groups for action, so criteria will also be developed to support individual communities or regions in identifying these.

The following goals and objectives relate to work that will be conducted at the local, regional, and provincial levels.

1. Secure targeted and sustainable funding to implement the *Alberta Suicide Prevention Strategy*.

2. Enhance mental health and well-being among Albertans.

3. Improve intervention and treatment for those at risk of suicide in Alberta.

4. Improve intervention and support for Albertans affected by suicide.

5. Increase efforts to reduce access to lethal means of suicide.

6. Increase research activities in Alberta on suicide, suicidal behaviour, and suicide prevention.

7. Improve suicide and suicidal behaviour-related surveillance systems in Alberta.

8. Increase evaluation and continuous quality improvement activities in Alberta for suicide prevention programs.

An Evaluation Framework will be developed within the first year and will be inclusive of both formative and summative aspects of the *Alberta Suicide Prevention Strategy*. The evaluation will be multi-staged in order to ensure the evaluation of all of the major components of the strategy.

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Teach me to survive

I am by far no writer. I am a mother, and a survivor of suicide. Surviving is something you must do everyday, when you lose a loved one through suicide. Not a day goes by that you don't deal with it. Why do we not open our minds to this fatal death until it sits at your door? We hear about it, we talk about it, we whisper when we know someone who passes away by suicide, but we continue to live in silence.

Why all the shame? Would we feel the same if our children or loved ones passed away naturally? Would it be easier than dealing with the pain of guilt?

We blame our self, our friends, our family and society, because we look for answers. We wish things could have been better, and when they are not, and terrible things happen, you must blame someone or something because passing the buck eases the pain. (If it wasn't for her he would still be here) or (that's what happens when drugs are involved.) (It must be the company he kept.) What clichés. So many explanations, no answers.

This is what a survivor experiences. Always looking for answers. Always having someone explain why this happened to you. It is hard enough dealing with your loss, but dealing with a society is as difficult.

Survivors of suicide find no answers; they continue to grieve with no explanation. Shoulda, woulda, coulda are all words we use frequently when we lose someone by suicide. It connects the dots for us, but it masks the pain.

Therefore, we suffer in silence.

Well, no more. Today I will shed thousands of tears and break millions of hearts. Men, women and children will grieve, but silence will be broken. We will not feel shame, guilt or hopelessness; instead we will open our minds and hearts. We will make an effort to understand that suicide is a choice, it is not my choice, but the choice of 400 Albertans every year. We will band together and fight this tragic choice. No more secrets, no more shame, no more guilt. We will find the answers to our questions; we will follow the road to hopelessness. Our paths will cross, and in the end, we will live in a society that sees suicide as a problem not a solution.

By Donna Conlin

In memory of my son
Andy Robert Conlin

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Introduction

Suicide in Alberta

Suicide is consistently a leading cause of death among Albertans. Suicide claims more lives annually than other more openly discussed issues such as motor vehicle collisions, AIDS or homicide. Historically, Alberta has generally had a higher suicide rate than the overall national rate (Alberta Centre for Injury Control and Research, 2000).

According to Alberta Mental Health Board (AMHB), in the 2001/02 fiscal year, 466 people in Alberta died by suicide. But suicide deaths are just the tip of the iceberg. For every death, there were nearly 6 hospitalizations and more than 15 emergency room visits for self-inflicted injuries in one year alone.

In many respects, Alberta follows international patterns for suicide. In particular, in Alberta and many parts of the world, there are gender differences in suicides and self-inflicted injuries. Men tend to die by suicide more frequently and women tend to be treated for self-inflicted injuries more frequently.

Coordinating Efforts

In 2004, *Advancing the Mental Health Agenda: A Provincial Mental Health Plan for Alberta* (PMHP) was released (Alberta Mental Health Board, Provincial Mental Health Planning Project, 2004). The Plan was developed through a partnership of relevant stakeholders. One of the significant recommendations was the call for AMHB to lead the development of a province-wide suicide prevention strategy to guide effective suicide prevention programs among provincial, regional and community stakeholders.

Initial planning work involved reviewing background information, research and other relevant strategies. In December 2004 AMHB held forums and met with interested stakeholders to discuss the development of the strategy and obtain input from across Alberta. The participants expressed an interest in a suicide prevention strategy and a commitment to the process of its development. A key recommendation was that a provincial group be created to guide the process.

Suicide prevention is becoming recognized as a systemic issue that cannot be the responsibility of one sector alone. There are a wide variety of factors that play a role in one's decision to attempt suicide and no one particular strategy will work for everyone. Issues such as addictions, homosexuality, and culture, and their relationship to suicide are complex and cannot be addressed without the active and meaningful participation of all stakeholders.

In February 2005 the Alberta Suicide Prevention Strategy Working Group met for the first time. The Working Group was comprised of survivors, service providers, researchers, representatives from relevant provincial and federal government departments, suicide- and mental health-related agencies, regional health authorities, and other individuals and groups with an interest in suicide prevention. For a complete list of Working Group members, see page 5.

The Working Group was responsible for three key tasks. First, it was responsible for preparing a draft suicide prevention strategy in a format suitable for review during a consultation process. Second, it ensured an effective consultation process with a broader range of stakeholders occurred across the province. Finally, the Working Group submitted a recommended suicide prevention strategy to the AMHB for consideration.

All of the partners involved in the process to date have been committed to ensuring the draft strategy will clearly link with existing suicide and mental health strategies relevant to Alberta, such as *A Provincial Mental Health Plan for Alberta* (Alberta Mental Health Board, Provincial Mental Health Planning Project, 2004) and the *Blueprint for a Canadian National Suicide Prevention Strategy* (Canadian Association for Suicide Prevention, 2004). The Working Group also utilized other national and international strategic work and their respective documents to guide their efforts, including strategies from Australia (Roxbee et al., 2000), Scotland (Scottish Executive, 2002), England (Department of Health, 2002), Norway (Holten & Norwegian Board of Health, n.d.), and Finland (Upanne & Arinperä, 1993). The Working Group also referred to the United Nations guidelines for the development of suicide prevention strategies (United Nations, Department for Policy Coordination and Sustainable Development, 1996) while developing the strategy.

In May 2005 the Working Group circulated the draft *Alberta Suicide Prevention Strategy* to over 200 individuals and groups who were identified as having a stake in suicide prevention. More than 45 responses were received, reflecting the views of countless more since most responses were on the behalf of organizations, groups and committees. This feedback was reviewed and incorporated by the Working Group.

An *Alberta Suicide Prevention Strategy* implementation plan will be developed to stimulate action across the province.

Alberta Suicide Prevention Strategy

The *Alberta Suicide Prevention Strategy* begins with a discussion of the purpose and priority groups and then outlines the goals and objectives of the provincial strategy. A glossary of terms is included at the end of the document to explain how various terms were defined for the purpose of this document. An Appendix to the strategy is also available which provides further information about the development of the strategy as well as a detailed report on suicide and self-inflicted injury data.

In addition to the Strategy and Appendix documents, a document containing background information about suicide, risk and protective factors, and international strategic work has been compiled.

To obtain a copy of the Appendix or Background Information, please visit www.amhb.ab.ca.

Alberta Suicide Prevention Strategy

Purpose

The purpose of the *Alberta Suicide Prevention Strategy* is to prevent and reduce suicide, suicidal behaviour, and the effects of suicide in Alberta over the next 10 years. The strategy will target a 19% reduction of the provincial suicide rate.

This 19% reduction target was adopted from *Framework for a Healthy Alberta* (Alberta Health and Wellness, 2003) which aims for a reduction in the provincial rate from 15.2 to 12.3 per 100,000 population by 2012.

Priority Groups

Suicide affects our entire society directly and indirectly. Key strategies and approaches which are aimed at the general population as well as targeted efforts for identified priority groups are essential to providing a comprehensive approach to suicide prevention to provide intermediate and long-term outcomes.

A Provincial Mental Health Plan for Alberta (Alberta Mental Health Board, Provincial Mental Health Planning Project, 2004) has identified the general population, school-aged children, and vulnerable populations such as Aboriginal youth as priorities for suicide prevention.

During the development of an implementation plan for the *Alberta Suicide Prevention Strategy*, criteria for defining provincial priority groups will be developed. There may also be more specific local priority groups for action, so criteria will also be developed to support individual communities or regions in identifying these.

At-Risk Groups

It is known that there are a number of factors which either protect people or put them at increased risk for suicide. These risk and protective factors exist at all levels, from the individual to their surrounding environments, and help to expose the various intervention strategies that may help prevent suicidal behaviour. Individuals may fit into one or more risk groups. For more information about the factors and the Determinants of Health, see *Alberta Suicide Prevention Strategy: Background Information.*

The following groups are believed to be at risk for suicide and will be considered as priority groups for the *Alberta Suicide Prevention Strategy.*

Aboriginal peoples

Aboriginal peoples include a number of specific groups including First Nations, Inuit, Métis.

Although Aboriginal peoples are generally at a higher risk for suicide, not all Aboriginal communities are affected by suicide to the same extent. There are

noticeable differences between provinces, regions and even between communities in the same area. Some communities have suffered the loss of many people, including young people, while others are almost untouched by suicide. One Canadian study from the University of British Columbia identified six protective factors that may explain the difference in suicide rates between First Nations communities. This study found that communities involved in self-sustaining activities such as land claims, self-government, education services, police and fire services, health services, or cultural facilities, have fewer suicides (Chandler & Lalonde, 1998).

Suicide is the second leading cause of injury death among the First Nations people in Alberta. When looking at mortality, suicide is among the largest disparities between First Nations people and the Canadian population. Suicide rates among First Nations males are 2.6 times higher than for the Canadian population in general. Among First Nations females the rates are 4 times higher (Alberta Centre for Injury Control and Research, 2000).

Affected by the aftermath of suicidal behaviour or a suicide death

Family members, significant others, or acquaintances who have experienced the suicide or self-injury of a loved one are at an increased risk of suicide themselves. They may begin to perceive suicide as a way of ending their own problems (Centre for Suicide Prevention, 1999).

Chronically or terminally ill

As with any suicide risk factor, terminal illness is not believed to be a sole cause for suicide. Suicidal risk may be elevated by physical pain, psychological pain, social isolation and other factors related to being terminally or chronically ill such as a realization that the suffering will not end.

Diagnosed with a mental illness

According to data prepared by Information Management at Alberta Mental Health Board, 85.6% of individuals discharged from regional acute hospitals with self-inflicted injuries also had a mental health issue in their diagnosis on discharge. And 61.7% of individuals who visited Emergency Rooms with self-inflicted injuries also had a mental health issue.

Elderly

Suicide among the elderly is a concern in Alberta. According to data prepared by Information Management at Alberta Mental Health Board, while the rate for suicide among Albertans aged 65 and older has decreased between fiscal years 1997/98 and 2001/02, the rates increased for the 75 to 79 year age group.

Homeless

Homeless adults and youth are at risk for suicide. A study among homeless adults in Los Angeles County revealed that 22% of those surveyed had attempted suicide in their lifetime and 25% reported thinking about suicide that year (Gelberg et al., 1988). In a Canadian study, Eynan et al. (2002) found that 61% of those surveyed reported suicidal thoughts and 34% reported a suicide attempt during their lifetime. A study of street youth revealed that 46% of those interviewed had attempted suicide at least once, and the majority of those had made more than one attempt (Kidd, 2004).

In custody

Suicide is common in correctional facilities. It is the leading cause of death for inmates. In 1996/97, the adult inmate suicide rate was more than twice the suicide rate of the adult Canadian population. Some suicide risk factors that are important for those in custody include how one views their imprisonment, the effects of incarceration, the conditions of the correctional facility, one's own history, current life or family situation, and race (John Howard Society of Alberta, 1999).

Living in rural and remote areas

Albertans living in rural areas are at an increased risk of dying by suicide. According to data prepared by Information Management at Alberta Mental Health Board, in the 2001/02 fiscal year the rate of suicide per 100,000 population for rural Alberta was 18.0 while the rate for urban Alberta was 13.8. In this analysis, urban Alberta was defined as the Capital and Calgary health regions.

Substance abuse and problem gambling

Research demonstrates that substance abuse is a risk factor for suicide, especially when it is coupled with another mental illness (De Leo & Evans, 2004). There are a variety of substances which have been linked to suicide, although it is believed that alcohol may have the largest impact because of its widespread use across the lifespan (De Leo & Evans, 2004). One study found that the relative risk of suicide was almost seven times higher among alcohol abusers than among non-abusers (Rossow & Amundsen, 1995). According to researchers Bergman and Brismar (1994), one quarter of alcoholic males studied had attempted suicide at least once. Consumption of alcohol and access to some toxic substances and to firearms may also be connected with suicide rates (WHO, 2001a).

Although there are no firm data on suicide deaths due to problem gambling, research shows there is a link between problem gambling and suicide attempts. In a telephone survey of 7,214 randomly sampled participants, Newman and Thompson (2003) assessed lifetime histories of psychiatric disorders and suicidal attempts. They found that, based on the 30 cases of pathological gambling identified, pathological gamblers were four times more likely to attempt suicide than non-pathological gamblers. They further suggest that the common link between problem gambling and suicide may be the association of both to mental illness. A Quebec study by Bourget et al. (2003) examined key characteristics of 75 problem gamblers who died by suicide. They reported that 25.3% of the deceased had previously attempted suicide – lower than what is usually found among the general population. The study also found an increase in suicides related to pathological gambling from 6 in 1998 to 31 in 1999 and 20 in 2000.

Middle-aged males

In general, more males die by suicide each year as compared to females. According to data prepared by Information Management at Alberta Mental Health Board, middle-aged males appear to be at increased risk. Suicides among males between 35 and 59 years of age have increased over a ten year period between fiscal years 1992/93 and 2001/02.

Previous suicide attempters

Rates of repeated hospitalizations include those patients who were admitted more than once in a fiscal year for self-inflicted injuries (any self-inflicted injury, not necessarily for the same type of injury). According to data prepared by Information Management at Alberta Mental Health Board, the provincial rate of repeated hospitalizations in fiscal year 2001/02 was 1.1, which indicates that provincially, persons were admitted just over once, on average, to regional inpatient hospitals for self-inflicted injuries.

School-aged teens and young adults

Suicide among school-aged teens and young adults in Alberta is a growing concern. The rate of hospitalizations for self-inflicted injuries among 15 to 24 year olds is nearly double the provincial rate, according to data prepared by Information Management at Alberta Mental Health Board. The disparity is even greater when examining emergency room visits where the rate for 15 to 24 year olds is more than two times higher than the provincial rate.

Gay, lesbian, bisexual, transgendered and two-spirited youth

Research demonstrates that gay, lesbian, bisexual and transgendered youth are at an increased risk for suicidal behaviour. Over the past 20 years, research results from varied non-random samples of gay, lesbian and bisexual male and female youth have produced incidences ranging from 20% to 42% for having attempted suicide in their lifetime (Remafedi, 1999). A study from Calgary, Alberta reported that homosexually oriented young adult males were at about 14 times more risk for a serious suicide attempt than their heterosexual counterparts (Bagley and Tremblay, 1997).

Working in specific occupation groups

Although the occupation of the deceased is not recorded on every death file, the existing data demonstrate important differences between occupation groups. According to data prepared by Information Management at Alberta Mental Health Board, in the 2001/02 fiscal year, the most common occupations among those who died by suicide were labourer, student, and homemaker. For females, the top three were homemaker, student and waitress. For males, the top three were labourer, student and truck driver.

Victims of family violence

Experiencing abuse from a parent during childhood is related to suicidal behaviour. A study by Dieserud et al. (2002) found that negative childhood events, including parental abuse, contribute significantly to risk for adult suicidal behaviour.

Goals and Objectives

The *Alberta Suicide Prevention Strategy* consists of eight goals and their corresponding objectives, all aimed at preventing and reducing suicide, suicidal behaviour, and the effects of suicide over the next 10 years. The following goals and objectives relate to work that will be conducted at the local, regional, and provincial levels. Further details about this will be outlined in the forthcoming Implementation Plan for the strategy.

Goals:

1. Secure targeted and sustainable funding to implement the *Alberta Suicide Prevention Strategy*.
2. Enhance mental health and well-being among Albertans.
3. Improve intervention and treatment for those at risk of suicide in Alberta.
4. Improve intervention and support for Albertans affected by suicide.
5. Increase efforts to reduce access to lethal means of suicide.
6. Increase research activities in Alberta on suicide, suicidal behaviour, and suicide prevention.
7. Improve suicide and suicidal behaviour-related surveillance systems in Alberta.
8. Increase evaluation and continuous quality improvement activities in Alberta for suicide prevention programs.

Goal 1: Secure targeted and sustainable funding to implement the *Alberta Suicide Prevention Strategy*.

Objectives

1.1 Develop an implementation plan and associated cost analysis for the *Alberta Suicide Prevention Strategy*.

1.2 Develop a process for defining priority groups at provincial and local levels.

1.3 Secure funding commitment that is adequate, equitable, and fair to implement the *Alberta Suicide Prevention Strategy*.

Goal 2: Enhance mental health and well-being among Albertans.

Objectives

2.1 Increase the number of public, private, professional and voluntary organizations that integrate suicide prevention into their ongoing programs and activities, including, but not limited to, education curriculum and private industry.

2.2 Identify and increase the number of provincial and local activities that are proven to enhance developmental and protective factors.

2.3 Identify and increase the number of plans to reduce the stigma attached to accessing mental health services or other suicide prevention supports.

2.4 Identify and increase the number of culturally-sensitive plans to increase public awareness that suicide is a community-wide problem that is preventable.

2.5 Identify and increase the number of culturally-appropriate provincial and local activities that are proven to address common precursors for suicide.

2.6 Increase the number of provincial and local activities that offer a culturally appropriate community development approach to promote the mental well-being of Aboriginal peoples.

2.7 Establish or adopt guidelines and develop training for the accurate and responsible reporting of suicide in the media.

2.8 After the establishment of media guidelines, increase the proportion of television and news reports that follow the guidelines.

Goal 3: Improve intervention and treatment for those at risk of suicide in Alberta.

Objectives

3.1 Increase appropriate and timely access to treatment services for those at risk of suicide.

3.2 Enhance community and regional capacity to develop, implement and evaluate evidence-based intervention and treatment programs that reduce risk for target groups.

3.3 Support and enhance evidence-based training programs for service providers that identify and intervene with those at risk of suicide, including, but not limited to, physicians, mental health workers, clinicians, police, counselors, addictions counselors, teachers, emergency medical services, employee assistance programs, and clergy.

3.4 Develop and implement cross-jurisdictional and system-wide protocols for the consistent and seamless support and treatment of those at risk for suicide.

3.5 Support the development of programs that offer the choice of using traditional healing practices in the treatment of Aboriginal peoples at risk for suicide.

3.6 Develop and disseminate evidence-based screening and intervention guidelines.

Goal 4: Improve intervention and support for Albertans affected by suicide.

Objectives

4.1 Enhance community and regional capacity to develop, implement and evaluate services and support programs for those bereaved by suicide.

4.2 Support the development of programs that offer the choice of using traditional healing practices for Aboriginal peoples bereaved by suicide.

4.3 Enhance community and regional capacity to develop, implement and evaluate services to support those who care for suicidal persons.

Goal 5: Increase efforts to reduce access to lethal means of suicide.

Objectives

5.1 Identify provincial areas of priority for reducing access to lethal means of suicide.

5.2 Support the development of policies, in partnership with relevant industries and service-providers, which will reduce access to lethal means of suicide in identified priority areas.

5.3 Support the enhancement of standard treatment policies to include educating people who care for those at risk of suicide about restricting access to lethal means of suicide.

Goal 6: Increase research activities in Alberta on suicide, suicidal behaviour, and suicide prevention.

Objectives

6.1 Establish and secure funding for a provincial suicide research agenda that is consistent with the themes identified by the Canadian Institutes of Health Research (see below) and developed in collaboration with the Alberta Research Centre for the Advancement of Mental Health and other applicable research organizations.

Canadian Institutes of Health Research Suicide Themes (Canadian Institutes of Health Research and Health Canada, 2003):

- Data Systems: Improvement and Expansion
- Evidence-based Practices
- Mental Health Promotion
- Multidimensional Models for Understanding Suicide-Related Behaviours
- Spectrum of Suicide Behaviours, including Suicide Attempters
- Suicide in Social and Cultural Contexts

6.2 Develop strategic partnerships and linkages with national and international organizations working in suicide prevention research.

Goal 7: Improve suicide and suicidal behaviour-related surveillance systems in Alberta.

Objectives

7.1 Improve the collection, analysis, interpretation and timely dissemination of data on suicide and suicidal behaviour.

7.2 Establish and support partnerships among various health information systems, mental health surveillance systems, and other sources of suicide-related data.

7.3 Increase the connection between provincial death data and health data to allow for links between the deceased and the health services they accessed while alive.

Goal 8: Increase evaluation and continuous quality improvement activities in Alberta on suicide prevention programs.

Objectives

8.1 Develop and implement an on-going and comprehensive evaluation framework for the *Alberta Suicide Prevention Strategy* including evaluation of activities at local, regional and provincial levels.

8.2 Increase the dissemination of best or promising practices in suicide prevention in collaboration with the Centre for Suicide Prevention, the Alberta Research Centre for the Advancement of Mental Health, and other stakeholders.

Evaluating the Alberta Suicide Prevention Strategy

The vision statement of the *Provincial Mental Health Plan for Alberta* (Alberta Mental Health Board, Provincial Mental Health Planning Project, 2004) clearly articulates the need for a culture of continuous improvement, evaluation and innovation (p. 11). The Principles of the *Alberta Suicide Prevention Strategy* further reflect this vision by stating that continuous quality improvement through research, surveillance, and evaluation will be an integral part of the *Alberta Suicide Prevention Strategy* models, and inclusion of these activities will be an expectation at both regional/local and provincial levels.

The *Alberta Suicide Prevention Strategy* is a 10-year strategy with accompanying measurable objectives and immediate, intermediate, and ultimate outcomes. An Evaluation Framework will be developed within the first year and will be inclusive of both formative and summative aspects of the *Alberta Suicide Prevention Strategy*. The evaluation will be multi-staged in order to ensure the evaluation of all of the major components of the strategy. Formative strategies will focus on key activities and processes as a means of generating information about the extent to which the strategy is implemented and how implementation can be modified to increase efficiency, improve quality, and better achieve outcomes. Summative strategies will assess effectiveness or the extent to which the immediate, intermediate and ultimate outcomes are achieved. This may or may not require a team of external evaluators.

After formative and summative aspects of the evaluation in each stage are complete, performance measures will be standardized and assessed on an ongoing basis to ensure that a continuous quality improvement cycle is maintained for the duration of the strategy and beyond. The following table illustrates a proposed timeline for the evaluation of the strategy.

Alberta Suicide Prevention Strategy Evaluation Timeline

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11 and Beyond
Development of Evaluation Framework	X										
Collection of baseline data to support the Evaluation Framework	X	X									
Formative evaluation		X	X	X	X						
Summative evaluation		X S	X S	X S	X I	X I	X I	X L	X L	X L	
Development of standardized performance measures for ongoing quality assessment (iterative process) and continuous quality improvement			X	X	X	X	X	X	X	X	X

Key: S - Short-term outcomes I - Intermediate outcomes L - Long-term outcomes

Glossary of Terms

The Working Group acknowledges that numerous definitions exist for many of the following terms. The definitions listed below come from a variety of sources and were adopted by the Working Group for the development of this strategy and companion documents.

Aboriginal	In section 35 of the *Constitution Act, 1982,* Aboriginal Peoples of Canada are identified as the *"Indian, Inuit and Métis peoples of Canada"* (Government of Alberta, 2000).
Best Practice	The provision of care and service utilizing evidence-based decision-making and a continuous quality improvement approach focused on best outcome within the context of available resources. It operationalizes evidence-based practice (Alberta Mental Health Board, 2005).
Community Development	A process of social action in which the people of a community come together to identify their common needs and concerns, make plans to meet their needs and solve their problems, and execute the plans with a maximum reliance on community strengths and resources (Gardiner & Gaida, 2002).
Co-morbidity	The co-occurrence of any two illnesses; often used to refer to the coexistence of a mental illness and an addictive disorder within an individual (Alberta Mental Health Board, 2005).
Contagion	A phenomenon whereby susceptible individuals are influenced towards suicidal behaviour through the knowledge of another person's suicidal acts (US Department of Health and Human Services, Public Health Service, 2001).
Contributing Factors	Contributing factors increase the exposure of the individual to either predisposing or precipitating factors. These include physical illness, sexual identity issues, unstable family, physical illness, risk-taking or self-destructive behaviour, suicide of a friend, isolation and substance abuse (Health Canada, 2002).
Crisis	An upset in an individual's baseline level of functioning that is generally thought to last no more than four to six weeks (Callahan, 1994).
Crisis Centers and Hotlines	Provides emergency support for people in crisis including those who are suicidal. Trained volunteers usually staff hotlines (Gardiner & Gaida, 2002).
Crisis Intervention	Brief, focused treatment that is begun when the individual is in crisis. The goal is the resolution of the crisis and the attainment of a state of equilibrium (Callahan, 1994).

Determinants of Health	A number of factors that work together to make people healthy, or not. They include: ▪ the social and economic environment, ▪ the physical environment, and ▪ the person's individual characteristics and behaviours (Canadian Health Network, 2005).
Epidemiology	The scientific study of statistics and trends in health and disease across communities (US Department of Health and Human Service, Public Health Service, 2001).
Evaluation	The systematic investigation of the value and impact of an intervention or program (US Department of Health and Human Service, Public Health Service, 2001).
Evidence-Based Practice	A decision-making process based on the most available and current literature, studies, and expert opinion that is known to have beneficial and effective outcomes. To utilize evidence based decision-making, clinicians are using search skills, critical appraisal skills and clinical judgment. The best evidence must then be applied by a clinician with expertise in considering the patient's unique values and needs. The final aspect of the process is evaluation of the effectiveness of care and the continual improvement of the process (Alberta Mental Health Board, 2005).
Family Support	Provides a variety of services designed to help parents fulfill their childrearing responsibilities. Services such as parent support groups, family counseling or emergency assistance, empower and strengthen parents with the aim of enhancing the overall health and well-being of family systems. By working with the family unit, family support programs aim at reducing risk factors, while enhancing important protective factors such as warm and caring parent-child relationships and the modeling of healthy adjustment by parents (Gardiner & Gaida, 2002).
First Nations	A term that came into common usage in the 1970s to replace the word "Indian," which some people found offensive. Although the term First Nation is widely used, no legal definition of it exists. Among its uses, the term "First Nations peoples" refers to the Indian peoples in Canada, both Status and Non-Status. Some Indian peoples have also adopted the term "First Nation" to replace the word "band" in the name of their community (Indian and Northern Affairs Canada, Communications Branch, 2004).
Formative Evaluation	Measuring the processes of program implementation, deliberation, and decision-making about the forms, modifications, and characteristics of services over time to provide information for program improvement (Fitz-Gibbon & Morris, 1987; Speer, 1998).

Gatekeepers	Individuals in a community who have contact with large numbers of community members as part of their usual routine. These individuals may be trained to identify people at risk of suicide and refer them to treatment or support services as appropriate (US Department of Health and Human Services, Public Health Service, 2001).
Gatekeeper Training	Provide the knowledge, skills and attitudes necessary for individuals to become effective gatekeepers (Gardiner & Gaida, 2002).
Generic Skill-Building	Enhance an individual's personal capabilities so that they may be able to adapt and deal effectively with daily tasks, challenges, and stresses. Generic skill building aims at enhancing certain factors that are known to protect against suicidal tendencies including creative problem solving, healthy coping, and interpersonal competence, which in turn contribute to positive self-esteem (Gardiner & Gaida, 2002).
Gestures	Behaviours where the intent is to gesture or communicate with others rather than to die (Linehan, 2000).
Impulsivity	Activities abruptly engaged in without forethought by an individual or consideration of potential consequences (Goldensen, 1984).
Indian	The term "Indian" collectively describes all the Indigenous people in Canada who are not Inuit or Métis. There are three categories of Indians in Canada: Status Indians, Non-Status Indians and Treaty Indians (Indian and Northern Affairs Canada, Communications Branch, 2004).
Intent	What the patient wants to achieve by suicidal acts, whether it is to die or to influence some significant other (Hjelmeland and Knizek, 1999).
Intentional	Injuries resulting from purposeful human action whether directed at oneself (self-directed) or others (assaultive), sometimes referred to as violent injuries (US Department of Health and Human Services, Public Health Service, 2001).
Intervention	A strategy or approach that is intended to prevent an outcome or to alter the course of an existing condition (US Department of Health and Human Services, Public Health Service, 2001).
Inuit	The Aboriginal people of Arctic Canada. Inuit live primarily in Nunavut, the Northwest Territories and northern parts of Labrador and Quebec. They have traditionally lived above the tree line in the area bordered by the Mackenzie Delta in the west, the Labrador coast in the east, the southern point of Hudson Bay in the south, and the High Arctic islands in the north.

	Inuit are not covered by the *Indian Act*. However, in 1939 the Supreme Court interpreted the federal government's power to make laws affecting "Indians, and Lands reserved for the Indians" as extending to Inuit (Indian and Northern Affairs Canada, Communications Branch, 2004).
Means Restriction	Suicide prevention efforts that reduce access to firearms, drugs, high places and other common means of committing suicide (Gardiner & Gaida, 2002).
Media Education	Educate the media about responsible suicide reporting practices in an effort to lower the negative and potentially contagious effects that sensational publicity about suicides can have on vulnerable people (Gardiner & Gaida, 2002).
Mental Disorder	A diagnosable illness characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress that significantly interferes with an individual's cognitive, emotional or social abilities; often used interchangeably with mental illness (US Department of Health and Human Services, Public Health Service, 2001).
Mental Health	Cannot be defined as simply the absence of detectable mental disease but a state of well-being in which the individual realizes his or her own abilities, can work productively and fruitfully, and is able to contribute to his or her community. The capacity of the individual, the group, and the environment to interact with one another in ways that promote subjective well-being, the optimal development and use of mental abilities (cognitive, affective and relational), the achievement of individual and collective goals consistent with justice and the attainment and preservation of conditions of fundamental equality (Alberta Mental Health Board, 2005).
Mental Health Promotion	A variety of strategies, all aimed at having a positive effect on mental health. The encouragement of individual resources and skills and improvements in the socio-economic environment are among them. Mental health promotion requires multi-sectoral action, involving a number of government sectors such as health, employment/industry, education, environment, transport and social and community services as well as non-governmental or community-based organizations such as health support groups, churches, clubs and other bodies (World Health Organization, 2001b).
Mental Illness	A term that refers collectively to all mental disorders; i.e., "health-related conditions that are characterized by alterations in thinking, mood, or behaviour (or some combination thereof) associated with distress and/or impaired functioning" (Alberta Mental Health Board, 2005).
Methods	Actions or techniques which result in an individual inflicting self-harm (US Department of Health and Human Services, Public Health Service, 2001).

Métis	The by-laws of the MNAA (Métis Nation of Alberta Association) define Métis membership as follows: "Métis means an Aboriginal person who self-identifies as Métis, who is distinct from Indian, and Inuit and (a) is a descendant of those Métis who received or were entitled to receive land grants and/or Scrip under the provisions of the *Manitoba Act, 1870*, or the *Dominion Lands Acts*, as enacted from time to time; and (b) a person of Aboriginal descent who is accepted by the Local Community as a Métis person" (Government of Alberta, 2000).
Organizational Policy	An organizational policy mandates and guides the effective handling of crisis situations within the organization's environment (Gardiner & Gaida, 2002).
Postvention	Activities that occur after a suicidal event, aimed at supporting those bereaved by suicide or the family and friends of someone who has attempted suicide.
Precipitating Factors	Precipitating factors are acute factors that create a crisis, such as interpersonal conflict or loss, pressure to succeed, conflict with the law, loss of stature in society, financial difficulties or rejection by society for some characteristic such as ethnic origin or sexual orientation (Health Canada, 2002).
Predisposing Factors	Predisposing factors are enduring factors that make an individual vulnerable to suicidal behaviour. They include mental illness, abuse, early loss, family history of suicide and difficulty with peer relationships (Health Canada, 2002).
Prevention	The identification of high-risk groups (and the individuals within them), the ready availability of responsive services; the dissemination of information, particularly about prodromal clues; the lowering of taboos so that citizens can more easily ask for help; the sensitization of professionals and ordinary citizens to the recognition of potential suicide, and so on (Shneidman, 1973).

Promising Practice	Incorporates the philosophy, values, characteristics, and indicators of other positive/effective public health interventions.
	▪ Is based on guidelines, protocols, standards, or preferred practice patterns that have been proven to lead to effective public health outcomes.
	▪ Is a process of continual quality improvement that:
	  ▪ Accumulates and applies knowledge about what is working and not working in different situations and contexts;
	  ▪ Continually incorporates lessons learned, feedback, and analysis to lead toward improvement/positive outcomes; and,
	  ▪ Allows for and incorporates expert review, feedback, and consensus from the public health field.

- Has an evaluation component/plan in place to move towards demonstration of effectiveness, however, it does not yet have evaluation data available to demonstrate positive outcomes (Alberta Mental Health Board, 2005).

Protective Factors

Factors that make it less likely that individuals will develop a disorder or engage in suicidal behaviours. These factors may encompass biological, psychological or social factors in the individual, family, society, and environment (US Department of Health and Human Services, Public Health Service, 2001).

Rates of Suicide

The number of actual suicides divided by the number of possible suicides. Rates of suicide are most often presented per 100,000 population (Centre for Suicide Prevention, 1997).

Research

Can be described both as the "systematic investigation to establish facts" and more broadly as "a search for knowledge". The actual methods used to ascertain this information can be varied. Quantitative methods focus on testing of hypotheses, finding generalizable results, measuring outcomes, or proving cause and effect relationships. Qualitative methods concentrate on exploring phenomena, developing theories, formulating hypotheses, and creating or expanding knowledge. Additionally, indigenous ways of knowing also constitute a class of research (Alberta Mental Health Board, 2005).

Resilience

Capacities within a person that promote positive outcomes and provide protection from factors that might otherwise place the person at risk for adverse health outcomes (US Department of Health and Human Services, Public Health Service, 2004).

Risk Factors/Indicators

Well-defined constructs that are empirically derived and population dependent. Risk factors tend to suggest risk over enduring periods of times. They can be explored individually and have significant meaning, even as isolated variables. Risk factors have limited implications for intervention and clinical practice (Rudd, 2003).

School Climate Improvement

A deliberate and planned process whereby a school takes an in-depth look at certain elements of its climate and then takes steps to positively influence these. The aim of this component is to organize the educational setting in ways that will enhance the well-being and health of students and staff (Gardiner & Gaida, 2002).

Screening

The routine administration of an instrument or procedure in order to find those individuals who are in need of a particular treatment or service. By directly asking people about their emotional state, screening actively seeks out suicidal individuals and ensures that everyone has an equal chance of being identified as to their potential risk status. Screening programs have been designed to identify and provide treatment or other assistance for individuals at high risk of suicide (Gardiner & Gaida, 2002).

Self-Harm	The various methods by which individuals injure themselves, such as self-laceration, self-battering, taking overdoses or exhibiting deliberate recklessness (US Department of Health and Human Services, Public Health Service, 2001).
Self-Mutilation	The direct and deliberate destruction or alteration of body tissue without conscious suicidal intent (Favazza, 1999).
Stigma	An object, idea, or label associated with disgrace or reproach (US Department of Health and Human Services, Public Health Service, 2001).
Suicidal Behaviour	A spectrum of activities related to thoughts and behaviors that include suicidal thinking, suicide attempts, and completed suicide (US Department of Health and Human Services, Public Health Service, 2001).
Suicidal Ideation	Having thoughts about killing oneself (Evans and Farberow, 1988).
Suicide	A conscious or deliberate act that ends one's life (Roxbee et al., 2000).
Suicide attempt	A potentially self-injurious behavior with a non-fatal outcome, for which there is evidence (either explicit or implicit) that the person intended at some (nonzero) level to kill him/her-self. A suicide attempt may or may not result in injuries (O'Carroll et al., 1996).
Suicide Attempt Survivors	Individuals who have survived a prior suicide attempt (US Department of Health and Human Services, Public Health Service, 2001).
Suicide Awareness Education	Provide individuals with the necessary attitudes, knowledge, and skills to be able to identify and help a potentially suicidal friend (Gardiner & Gaida, 2002).
Suicide Survivors	Family members, significant others, or acquaintances who have experienced the loss of a loved one due to suicide; sometimes this term is also used to mean suicide attempt survivors (US Department of Health and Human Services, Public Health Service, 2001).
Summative Evaluation	Determining the effectiveness, value, or worth of services through the measurement of program outcomes in order to make basic decisions about whether a program is effective and whether it should be continued (Fitz-Gibbon & Morris, 1987; Speer, 1998).
Support Groups	Bring together vulnerable individuals in a caring and comfortable group environment where they receive the support of peers and practice valuable life skills. Support groups serve the purpose of counteracting a number of early risk factors experienced by vulnerable people, while enhancing important protective factors (Gardiner & Gaida, 2002).

Surveillance	The ongoing, systematic collection, analysis and interpretation of health data with timely dissemination of findings (US Department of Health and Human Services, Public Health Service, 2001).
System Wide Protocol	A joint agreement between key agencies within a geographic area that reflects a coordinated response to people at risk. System wide protocols document the procedures to be followed by each agency in the aftermath of specific situations, such as a youth suicide attempt or cluster suicide in the community (Gardiner & Gaida, 2002).
Transgender	A person whose gender identity, outward appearance, expression and/or anatomy do not fit into conventional expectations of male or female. Often used as an umbrella term to represent a wide range of non-conforming gender identities and behaviours (Wells & Tsutsumi, 2005).
Treatment Services	Includes screening, assessment and clinical intervention. Linkage to other supports and education is available. Short-term treatment may be sufficient. Longer term rehabilitation and support is needed for others (Gardiner & Gaida, 2002).
Two-spirited	Some Aboriginal people identify themselves as two-spirited rather than as lesbian, gay, bisexual or trans-identified. Historically, in many Aboriginal cultures, two-spirited persons were respected leaders and medicine people and were often accorded special status based on their unique abilities to understand both male and female perspectives (Wells & Tsutsumi, 2005).
Warning Signs	Often poorly defined constructs that suggest imminent risk of suicide demanding specific and probably immediate interventions. They can be clinically identified or derived and can be applied to individual cases. They are of an episodic or transient nature (Rudd, 2003).

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ALBERTA SUICIDE PREVENTION STRATEGY

Appendix
October 2005

AMHB
ALBERTA MENTAL HEALTH BOARD
...Advancing Mental Health

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Appendix A

Suicide in Alberta*

This section of the Alberta Suicide Prevention Strategy Appendix reports on available data for suicide deaths and self-inflicted injuries. The important information will guide decision-making and planning. It does not diminish the significance of individuals affected by suicide. These numbers represent real people in Alberta.

It should also be noted that the data presented here are likely incomplete as there are suicide-related injuries and deaths that are not recorded as such or that are never treated and therefore never recorded.

Suicide is consistently a leading cause of death among Albertans. Suicide claims more lives annually than other more openly discussed issues such as motor vehicle collisions, AIDS or homicide. Historically, Alberta has generally had a higher suicide rate than the overall national rate (Alberta Centre for Injury Control and Research, 2000).

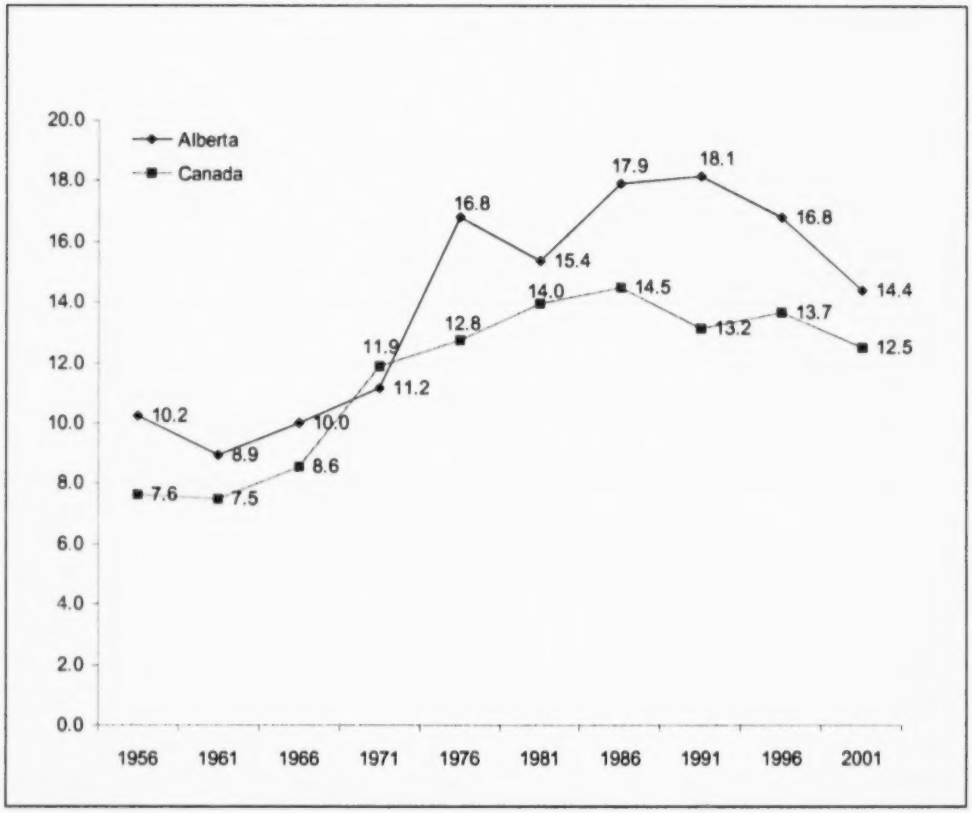
In many respects, Alberta follows international patterns for suicide. In particular, in Alberta and many parts of the world, there are gender differences in suicides and self-inflicted injuries. Men tend to die by suicide more frequently and women tend to be treated for self-inflicted injuries more frequently.

* Note: Unless otherwise stated, the data in this section have been prepared by Information Management, Alberta Mental Health Board using the following sources:

Emergency Room Data: Ambulatory Care Classification System (ACCS), 2001/02
Inpatient Hospitalizations Data: Discharge Abstract Database (DAD), 2001/02
Suicide Data: Alberta Health and Wellness Vital Statistics, January 2005

Part One: Suicide Deaths

Figure 1
Rates of Suicides per 100,000 in Canada and Alberta



Note. Data source: Thompson, A. (personal communication, June 2005). Raw data used to create the Canadian Social Problem Index reported in Thompson, A., Howard, A. & Jin, Y. (2001). A Social Problem Index for Canada. *Canadian Journal of Psychiatry*, *46*, 45-51.

Table 1
Rates of Suicide Deaths per 100,000 by Gender
Comparison of Five Years

Fiscal Year	Male	Female	Total
1997/98	22.0	5.9	13.9
1998/99	24.2	6.0	15.1
1999/00	22.9	5.8	14.3
2000/01	21.4	7.3	14.3
2001/02	23.8	6.6	15.2

Figure 2
Rates of Suicide Deaths per 100,000 by Gender
Comparison of Five Years

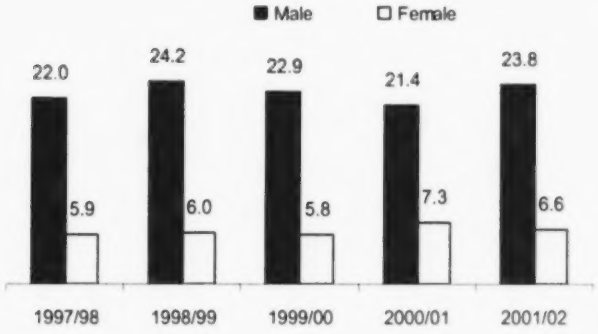


Table 2
Suicides in Alberta
% Change over 5 Years by Age Group

	1997/98	2001/02	% Change
10 to 14	6	2	-67%
15 to 24	66	84	**27%**
25 to 34	70	79	**13%**
35 to 44	120	121	**1%**
45 to 54	63	104	**65%**
55 to 64	30	39	**30%**
65 to 74	24	20	-17%
75 to 84	12	14	**17%**
85+	6	3	-50%

Over the five year period from 1997/98 to 2001/02, suicides have risen by 24% for people between the ages of 35 and 64, with the highest increase between the ages of 45 and 54.

In 2003 there were a total of 455 suicides investigated by Alberta's Office of the Chief Medical Examiner, 19 of which were from out of province or of no identifiable address. The Aspen and Peace regions had the highest rates of suicide of the nine regions at 23.1 and 22.9 per 100,000 population respectively, well above the provincial rate of 14.1.

Figure 3
Suicides by Regional Health Authority of Residence, 2003

Key: Rate of Suicides, (Actual number of suicides in brackets)

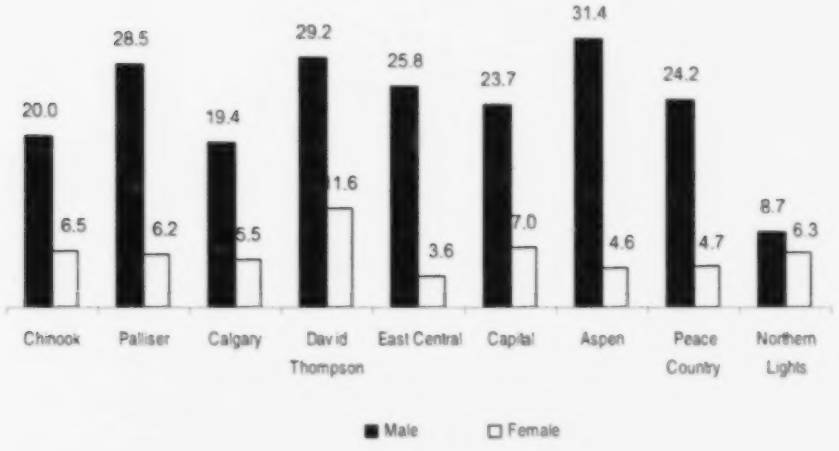
There were 436 suicides in Alberta in 2003.
The provincial rate of suicides per 100,000 was 14.1

Table 3
Rates of Suicide Deaths per 100,000
by Regional Health Authority and Gender
Fiscal Year 2001/02

	Male	Female	Total
Chinook	20.0	6.5	13.2
Palliser	28.5	6.2	17.4
Calgary	19.4	5.5	12.4
David Thompson	29.2	11.6	20.4
East Central	25.8	3.6	14.6
Capital	23.7	7.0	15.3
Aspen	31.4	4.6	18.2
Peace Country	24.2	4.7	14.7
Northern Lights	8.7	6.3	7.6
Total	23.8	6.6	15.2

Overall, the highest rate of suicide deaths occurred in David Thompson in 2001/02, while the lowest rate occurred in Northern Lights.

Figure 4
Rates of Suicide Deaths per 100,000
by Regional Health Authority and Gender
Fiscal Year 2001/02



The lowest rate of suicide deaths for women occurred in East Central. The highest rate of suicides for males occurred in Aspen and the highest rate of suicides for females was in David Thompson.

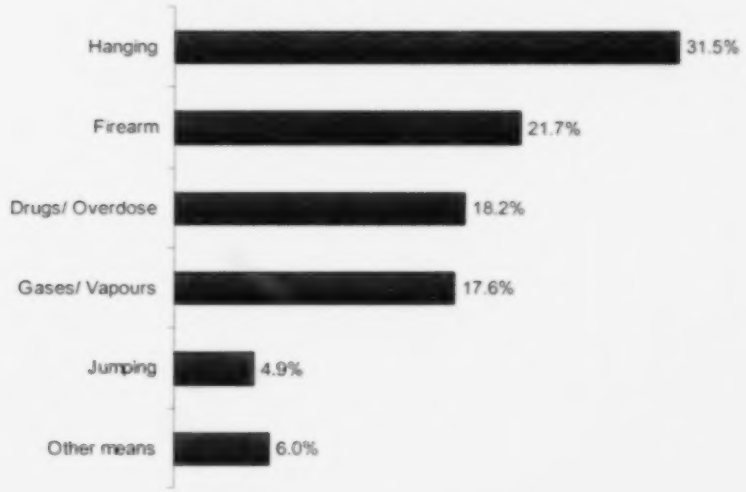
Table 4
Rates of Suicide Deaths per 100,000 by Age
2001/02

	Female	Male	Total
10 to 14	1.8	0.0	0.9
15 to 24	7.7	29.1	18.6
25 to 34	4.0	31.3	17.7
35 to 44	9.1	37.0	23.0
45 to 54	13.8	33.0	23.6
55 to 64	8.6	21.7	15.2
65 to 74	4.4	18.7	11.4
75 to 84	6.5	22.9	13.4
85+	0.0	28.1	8.8
Provincial Total	**6.6**	**23.8**	**15.2**

Note. Based on population estimates March 31, 2002 from Alberta Health & Wellness.

In Alberta, the young adult and middle-aged populations are at increased risk for suicide. Albertans between the ages of 35 and 54 are at the highest risk of death by suicide. Among males, those aged 15 to 54 have the highest rates of suicide deaths, while the highest rates among women are in the 35 to 54 age group.

Figure 5
Suicide Deaths by Cause of Death, 2001/02
Intentional Self-Harm/Self-Poisoning



Note. "Hanging" includes strangulation and suffocation. "Other means" include causes such as crashing motor vehicles, using sharp objects, exposure to alcohol, drowning/submersion.

Figure 6
Males in Alberta 2001/02
Intentional Self-Harm/Self-Poisoning Suicides

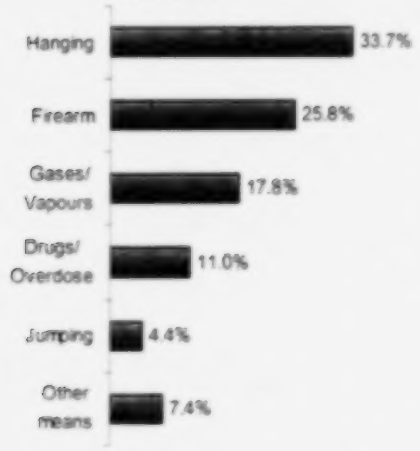
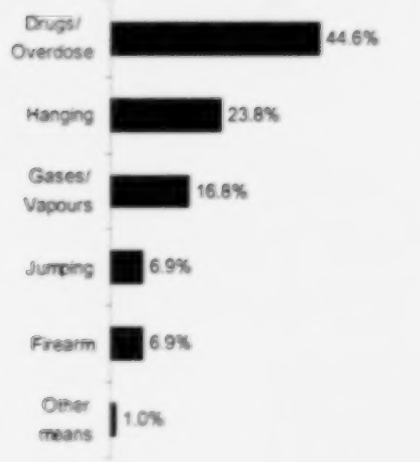


Figure 7
Females in Alberta 2001/02
Intentional Self-Harm/Self-Poisoning Suicides



Another way of assessing the impact of suicide in Alberta is by measuring the Potential Years of Life Lost (PYLL). The PYLL is an indicator of premature mortality and highlights the loss to society as a result of early deaths. It is based on the assumption that, on average, we are destined to live to about 75 years of age. Thus, someone who dies at 50 has lost 25 years from their potential life expectancy. The rate is obtained by dividing total potential years of life lost from all suicides by the total population less than 75 years of age.

The total potential years of life lost to suicide in Alberta in 2001/02 was 15,986. Table 5 on the following pages provides an overview of PYLL for suicide compared to other common causes of death by age group in 2001/02.

Table 5
Potential Years of Life Lost
Major Causes of Death (Age under 75 Years)
Alberta 2001/02

Cause of Death	Total				Male				Female			
Under 15 Years	**Deaths**	**PYLL**	**PYLL%**	**PYLL SR**	**Deaths**	**PYLL**	**PYLL%**	**PYLL SR**	**Deaths**	**PYLL**	**PYLL%**	**PYLL SR**
Cancer (Malignant Neoplasms)	10	672	22%	106	4	284	21%	87	6	388	23%	125
Heart Disease	2	144	5%	23	1	70	5%	22	1	74	4%	24
Motor Vehicle Accidents	24	1,643	53%	259	14	952	69%	293	10	691	40%	223
Homicide	7	509	16%	80	1	73	5%	22	6	436	25%	141
Suicide	2	125	4%	20	0	0	0%	0	2	125	7%	40
Total	45	3,093		487	20	1,379		424	25	1,714		553
15 - 24 Years Old												
Cancer (Malignant Neoplasms)	20	1,100	9%	243	14	776	8%	338	6	324	11%	146
Heart Disease	1	53	0%	12	0	0	0%	0	1	53	2%	24
Motor Vehicle Accidents	103	5,728	45%	1,267	81	4,493	46%	1,955	22	1,235	43%	556
Homicide	21	1,162	9%	257	15	827	8%	360	6	335	12%	151
Suicide	84	4,590	36%	1,015	67	3,656	37%	1,590	17	934	32%	420
Total	229	12,633		2,795	177	9,752		4,242	52	2,881		1,297
25-34 Years Old												
Cancer (Malignant Neoplasms)	33	1,475	17%	331	19	853	13%	382	14	622	32%	280
Heart Disease	7	304	4%	68	4	167	3%	75	3	137	7%	62
Motor Vehicle Accidents	55	2,474	29%	555	44	1,981	30%	887	11	493	25%	222
Homicide	15	696	8%	156	8	365	6%	163	7	331	17%	149
Suicide	79	3,573	42%	801	70	3,184	49%	1,425	9	389	20%	175
Total	189	8,522		1,911	145	6,550		2,932	44	1,972		887
35-44 Years Old												
Cancer (Malignant Neoplasms)	167	5,714	37%	1,087	68	2,302	24%	878	99	3,412	58%	1,295
Heart Disease	58	1,985	13%	378	43	1,466	16%	559	15	519	9%	197
Motor Vehicle Accidents	73	2,594	17%	493	49	1,731	18%	660	24	863	15%	328
Homicide	21	763	5%	145	15	539	6%	206	6	224	4%	85
Suicide	121	4,267	28%	812	97	3,418	36%	1,303	24	849	14%	322
Total	440	15,323		2,915	272	9,456		3,606	168	5,867		2,227

Table 5, continued

45-54 Years Old											
Cancer (Malignant Neoplasms)	455	11,368	56%	2,580	215	5,338	43%	2,383	240	6,030	75%	2,782
Heart Disease	197	4,916	24%	1,116	162	4,049	33%	1,808	35	867	11%	400
Motor Vehicle Accidents	53	1,345	7%	305	40	1,019	8%	455	13	326	4%	150
Homicide	6	159	1%	36	5	129	1%	58	1	30	0%	14
Suicide	104	2,668	13%	605	74	1,897	15%	847	30	771	10%	356
Total	815	20,456		4,642	496	12,432		5,551	319	8,024		3,703
55-64 Years Old												
Cancer (Malignant Neoplasms)	803	12,156	62%	4,728	425	6,396	54%	4,948	378	5,760	76%	4,506
Heart Disease	408	6,085	31%	2,367	314	4,712	40%	3,645	94	1,373	18%	1,074
Motor Vehicle Accidents	34	554	3%	215	19	301	3%	233	15	253	3%	198
Homicide	4	63	0%	25	3	44	0%	34	1	19	0%	15
Suicide	39	639	3%	249	28	459	4%	355	11	180	2%	141
Total	1,288	19,497		7,583	789	11,912		9,215	499	7,585		5,933
65-74 Years Old												
Cancer (Malignant Neoplasms)	1,277	6,674	63%	3,795	740	3,805	58%	4,444	537	2,869	72%	3,178
Heart Disease	733	3,576	34%	2,033	509	2,578	39%	3,011	224	998	25%	1,106
Motor Vehicle Accidents	34	197	2%	112	22	124	2%	145	12	73	2%	81
Homicide	2	12	0%	7	2	12	0%	14	0	0	0%	0
Suicide	20	124	1%	71	16	98	1%	114	4	26	1%	29
Total	2,066	10,583		6,017	1,289	6,617		7,729	777	3,966		4,393
Total												
Cancer (Malignant Neoplasms)	2,765	39,159	43%	1,335	1,485	19,754	34%	1,335	1,280	19,405	61%	1,336
Heart Disease	1,406	17,063	19%	582	1,033	13,042	22%	881	373	4,021	13%	277
Motor Vehicle Accidents	376	14,535	16%	496	269	10,601	18%	716	107	3,934	12%	271
Homicide	76	3,364	4%	115	49	1,989	3%	134	27	1,375	4%	95
Suicide	449	15,986	18%	545	352	12,712	22%	859	97	3,274	10%	225
Total	5,072	90,107		3,073	3,188	58,098		3,926	1,884	32,009		2,203

Notes:

1. PYLL - Potential Years of Life Lost, denotes the total number of years of life lost from an established life expectancy (75 years).
2. PYLL SR - PYLL Standardized rate per 100,000 population (AHW - 31 March 2002)]
3. PYLL % - The percent of the total PYLL attributed to by each cause.
4. Total percent may not add up to 100% due to rounding error.
5. Diseases identified with ICD-10-CA.
6. Data source - Alberta Vital Statistics Database 2005.

Table 6
Suicide Deaths by Marital Status
2001/02

	Total
Divorced	14.8%
Married	35.2%
Never Married	44.8%
Unknown	1.7%
Widowed	3.4%

Table 7
Suicide Deaths by Marital Status and Gender
2001/02

	Female	Male
Divorced	21.8%	12.9%
Married	33.7%	35.6%
Never Married	33.7%	47.9%
Unknown	3.0%	1.4%
Widowed	7.9%	2.2%

Table 8

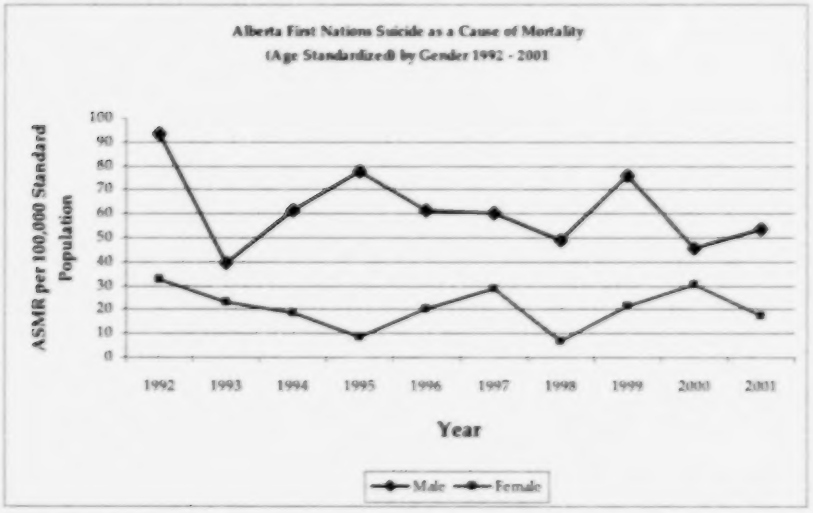
Suicide By Occupation Type Top 15 Occupation Types 2001/02		**Suicide By Occupation Type Top 15 Occupation Types Females: 2001/02**		**Suicide By Occupation Type Top 15 Occupation Types Males: 2001/02**	
Labourer	11%	Homemaker	21%	Labourer	13%
Operator	8%	Health/Dental	14%	Operator	8%
Student	7%	Administration	11%	Driver	6%
Health/Dental	5%	Student	9%	Student	6%
Driver	5%	Restaurant/Hotel	7%	Farming	6%
Homemaker	5%	Retail/Sales	6%	Construction	6%
Farming	5%	Operator	5%	Gas & Oil	5%
Gas & Oil	5%	Management	4%	Auto	3%
Construction	5%	School	4%	Retail/Sales	3%
Retail/Sales	4%	Custodian	3%	Custodian	2%
Administration	3%	Gas & Oil	2%	Management	2%
Restaurant/Hotel	3%	Business/Owner	2%	School	2%
Management	3%	Accounting	2%	Electrical	2%
School	3%	Labourer	1%	Unemployed	2%
Custodian	3%	Driver	1%	Carpenter	2%

Note. There are 257 occupations listed - these are grouped for clarity and represent the top 15 groups.

Table 9
Alberta Suicides by Month
2001/02

	Female	Male	Total
April	14%	10%	11%
May	9%	9%	9%
June	8%	8%	8%
July	7%	7%	7%
August	9%	7%	7%
September	9%	10%	10%
October	15%	9%	10%
November	4%	8%	7%
December	4%	11%	10%
January	6%	6%	6%
February	10%	9%	9%
March	6%	7%	6%

Figure 8
Suicide Among Alberta First Nations, 1992 - 2001



Note. From HAS (Health Assessment and Surveillance) First Nations Mortality Database, Alberta

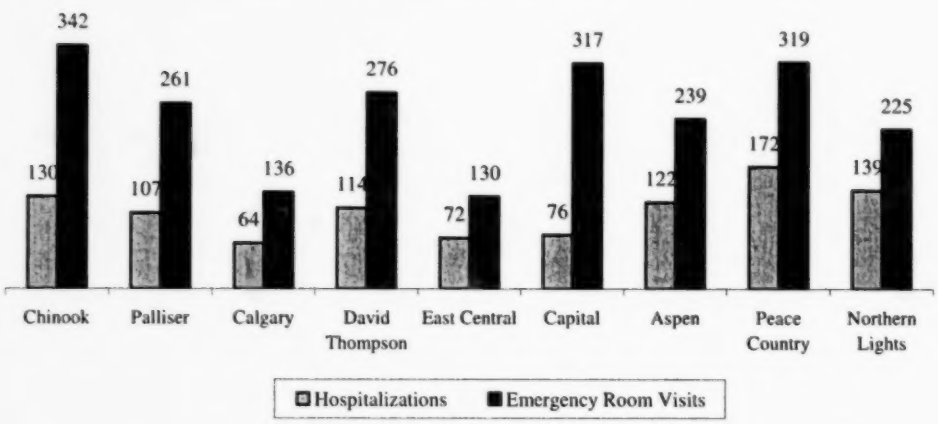
The rate of suicide among First Nations peoples in Alberta is consistently higher than the provincial rate. Between 1992 and 2001, First Nations men had a consistently higher rate of completed suicide than females.

Part Two: Suicide-Related Injuries

Although suicide is often discussed as a completed act, it is important to acknowledge and examine attempted suicide and the resulting injuries because they have a significant impact on health care and society at large. The following data discuss suicide-related injuries in the context of hospitalizations and emergency room visits. Caution must be exercised when interpreting the emergency room data due to some collection issues, leading to under-reporting of outpatient activity.

Figure 9

Rates per 100,000 for Hospitalizations and Emergency Room Visits (for Self-Inflicted Injury) by Regional Health Authority - 2001/02



The provincial rate of hospitalizations for self-inflicted injury in 2001/02 was 90.6 per 100,000. Calgary, East Central, and Capital had the lowest rates per 100,000 for self-inflicted hospitalizations. The highest rate of hospitalizations for self-inflicted injuries was in Peace Country in 2001/02.

The provincial rate of visits to Emergency Rooms for self-inflicted injury in 2001/02 was 235.4 per 100,000. Calgary and East Central had the lowest rates per 100,000 for self-inflicted visits to Emergency Rooms. The highest rate of visits to Emergency Rooms for self-inflicted injuries was in Chinook in 2001/02.

Table 10
Hospitalization Rates per 100,000 for Self-inflicted Injuries by Age Group and Gender
2001/02

	Female	Male	Total
1 to 4	0.0	1.3	0.6
5 to 14	41.4	11.0	25.8
15 to 24	205.2	122.7	163.3
25 to 34	156.9	126.7	141.8
35 to 44	148.4	109.1	128.8
45 to 54	124.1	67.0	95.1
55 to 64	45.4	39.5	42.4
65 to 74	25.5	36.2	30.7
75 to 84	26.1	41.2	32.4
85+	17.1	9.4	14.7
Provincial Total	**107.7**	**73.5**	**90.6**

Note. Based on population estimates March 31, 2002 from Alberta Health & Wellness.

Hospitalization rates for self-inflicted injuries in Alberta are highest among women, particularly among women aged 15 to 24. Among men, those aged 15 to 34 are at highest risk of hospitalization for self-inflicted injuries.

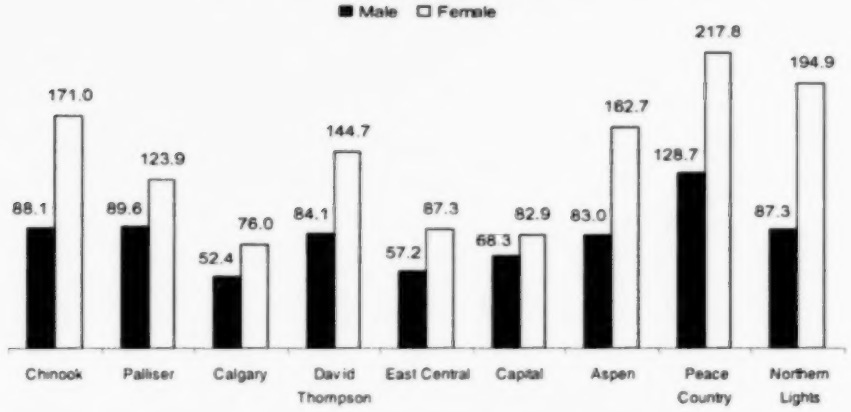
Table 11
Rates per 100,000 for Emergency Room Visits for Self-Inflicted Injuries by Age Group and Gender
2001/02

	Female	Male	Total
1 to 4	9.1	10.0	9.6
5 to 14	86.0	26.5	55.5
15 to 24	624.7	386.7	503.7
25 to 34	411.8	340.6	376.1
35 to 44	367.4	265.0	316.3
45 to 54	257.5	182.6	219.4
55 to 64	117.3	94.4	105.8
65 to 74	33.2	50.2	41.5
75 to 84	18.0	52.7	32.4
85+	17.1	37.4	23.5
Provincial Total	**274.3**	**196.5**	**235.4**

Note. Based on population estimates March 31, 2002 from Alberta Health & Wellness.

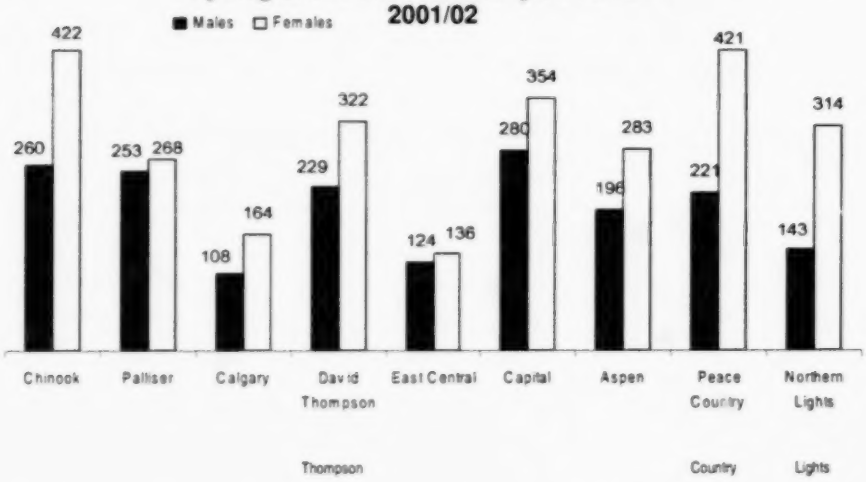
As in the case of hospitalization for self-inflicted injuries, women have the highest rate of emergency room visits for self-inflicted injuries, particularly women aged 15 to 24. Men aged 15 to 34 are also at higher risk of emergency room visits for self-inflicted injuries.

Figure 10
Hospitalization Rates per 100,000 for Self-Inflicted Injuries by Regional Health Authority and Gender
2001/02



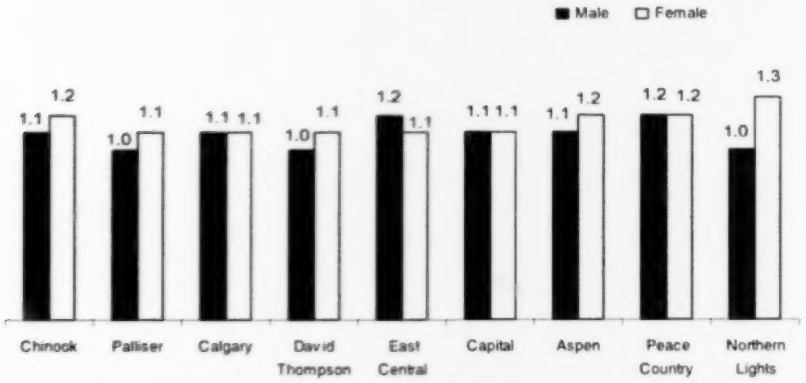
The rate of hospitalizations for self-inflicted injury in 2001/02 for males was 73.5 per 100,000, while the rate for females was 107.7 per 100,000. In Peace Country, rates of males per 100,000 were one and a half times higher than the provincial rate; while rates of females were over 2 times higher than the provincial rate.

Figure 11
Rates per 100,000 for Emergency Room Visits for Self-Inflicted Injuries By Regional Health Authority and Gender
2001/02



The rate of visits to Emergency Rooms for self-inflicted injury in 2001/02 for males was 196.5 per 100,000, while the rate for females was 274.3 per 100,000. In Capital, rates of males per 100,000 were nearly 1.5 times higher than the provincial rate. In Chinook, rates of females were over 1.5 times higher than the provincial rate.

Figure 12
Rates of Repeated Hospitalizations by Regional Health Authority and Gender
2001/02

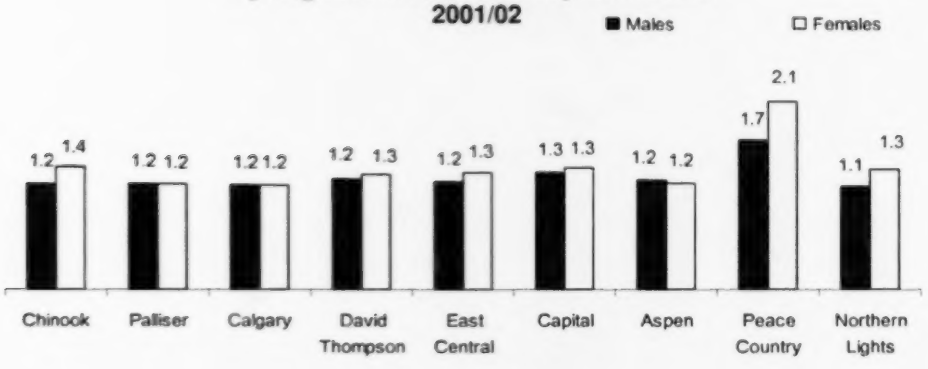


Rates of repeated hospitalizations include those patients who were admitted more than once in a fiscal year for self-inflicted injuries (any self-inflicted injury, not necessarily for the same type of injury).

The provincial rate of repeated hospitalizations was 1.1, which indicates that provincially, persons were admitted just over once, on average, to regional inpatient hospitals for self-inflicted injuries in one fiscal year alone. Males in Palliser were the only demographic group who did not have any repeated hospitalizations for self-inflicted injuries.

Rates of repeated visits to regional emergency rooms include those patients who went to an emergency room more than once in a fiscal year for self-inflicted injuries (any injury, not specifically for the same type of injury).

Figure 13
Rates of Repeated Emergency Room Visits
by Regional Health Authority and Gender
2001/02



The provincial rate of repeated visits to Emergency Rooms was 1.25 which indicates that provincially, persons went to emergency rooms just over once, on average, for self-inflicted injuries in that fiscal year.

Figure 14
Total Discharges from Regional Acute Hospitals, Total Visits to Regional Hospital Emergency Rooms (Intentional Self-Harm/Self-Poisoning) - 2001/02

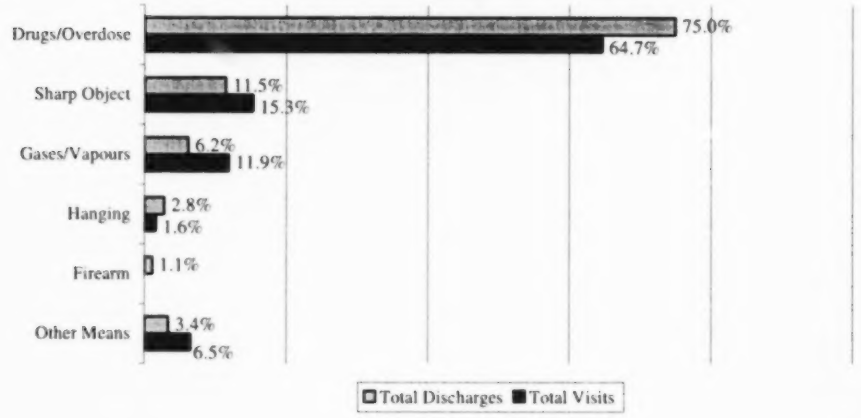


Figure 15
Males in Alberta
Intentional Self-Harm/Self-Poisoning
Hospitalizations & ER Visits 2001/02

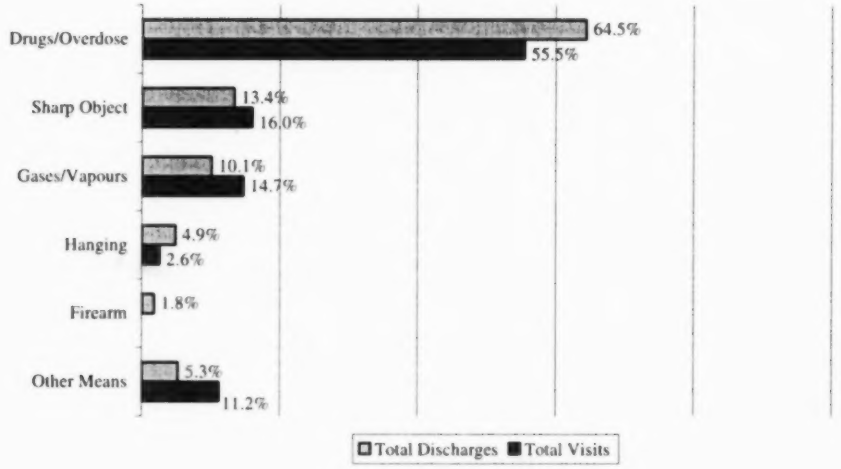
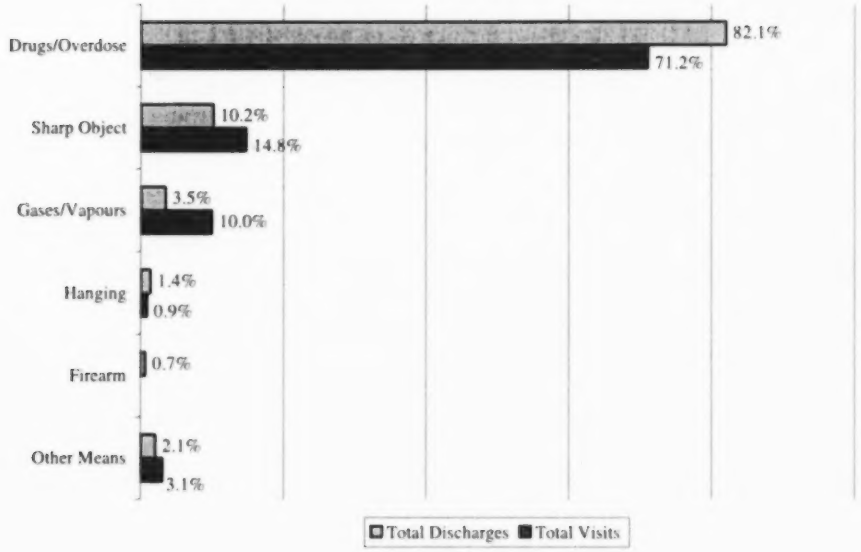
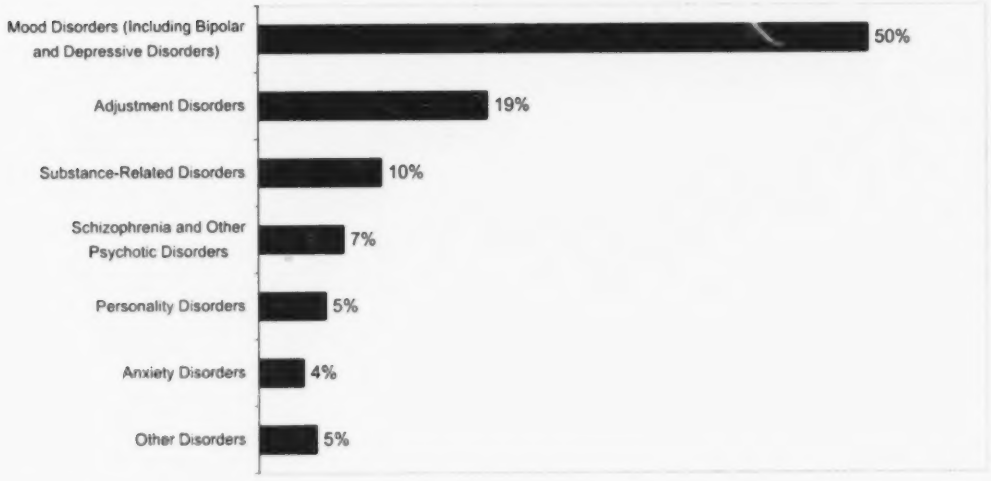


Figure 16
Females in Alberta
Intentional Self-Harm/Self-Poisoning
Hospitalizations & ER Visits 2001/02



Forty percent of the patients who were discharged from regional inpatient hospitals in 2001/02 and had a self-inflicted injury had a most responsible diagnosis of a mental health issue. When all diagnoses are considered (not just the most responsible diagnosis), 85.6% of individuals discharged from regional acute hospitals with self-inflicted injuries also had a mental health issue in their diagnosis on discharge.

Figure 17
Regional Inpatient Hospitals: Most Responsible Diagnosis Upon Discharge for Self-Inflicted Injuries 2001/02
Patients with a most responsible diagnosis of a mental health issue

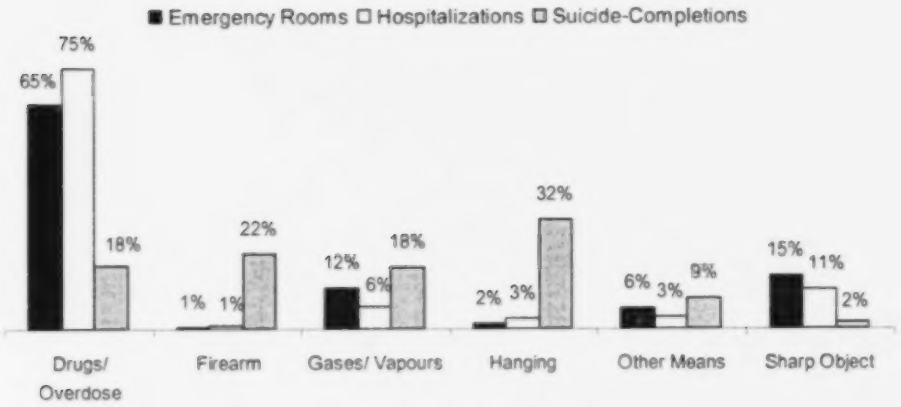


Of the patients discharged from regional hospitals who had self-inflicted injury in 2001/02 with a most responsible diagnosis of a mental health issue on discharge, 50% were diagnosed with Mood Disorders (including Bipolar and Depressive Disorders).

A total of 61.7% of individuals who visited Emergency Rooms with self-inflicted injuries also had a mental health issue (all diagnoses including most responsible and secondary diagnoses).

Part 3: Summary of Common Suicide and Self-Inflicted Injury Methods

Figure 18
Suicide and Self-Inflicted Injury Methods
2001/02



Appendix B

Major Milestones in Suicide Prevention in Alberta

1970s

During the 1970s attention began to be paid to the issue of suicide in Alberta with the release of groundbreaking studies and reports. The foundation for suicide prevention was building.

1973	Alberta Government commission study of highway accidents and suicide
1975	McKenzie Task Force on Highway Accidents and Suicide
1976	Boldt Task Force on Suicides Report
1978	First provincial Suicidologist position established

1980s

In the 1980s important prevention work began on a provincial basis and community-based program were initiated. Alberta was becoming a world-leader in suicide prevention.

1981	Department of Social Services and Community Health Act and Ministerial Order #47/81 Highlights: • Suicide Prevention Provincial Advisory Committee (SPPAC) established • Additional annual funding • Mandated outreach to smaller cities, rural areas and First Nations communities; province-wide suicide information, education and training projects; and establishment of university-based research centre
1981 – 1983	Community Interagency Suicide Prevention Programs (regional outreach) established
1981	Suicide Information and Education Centre (SIEC) established
1982	Suicide Prevention Training Programs (SPTP) established

1990s

The early 1990s saw continued suicide prevention efforts with some changes at the provincial level during health care restructuring. Community-based groups called for renewed leadership and attention to the issue and began to coordinate efforts regionally.

1990	Suicide Prevention Provincial Advisory Committee (SPPAC) disbanded
1990	Provincial Suicide Prevention Management Committee (PSPMC) established

1991 Youth Suicide Prevention Coordinator position established

1993 Calgary-based group organized and conducted five day Inter-Regional Expert Meeting to develop a policy guideline for national strategies on suicide prevention that could be adopted by countries from all regions of the world

1994 Provincial Suicidologist and Youth Suicide Prevention Coordinator positions abolished during health care restructuring

1997 Provincial Suicide Prevention Management Committee (PSPMC) presentation to Standing Policy Committee

1999 Alberta Health and Alberta Mental Health Board, Suicide Prevention Review Forum

2000s

In the first half of this decade, regional suicide prevention programs have continued and there is renewed support for provincial leadership on suicide prevention.

2001 Provincial Suicide Prevention Coordinator position established

2002 Alberta Heritage Foundation for Medical Research, Health Technology Assessment released *Efficacy of Suicide Prevention Programs for Children and Youth*

2002 Transfer of Alberta Mental Health Board programs and services to regional health authorities announced

2002 Lifting the Silence on Suicide: An Aboriginal Conference on Suicide Prevention in Alberta

2003 Alberta Heritage Foundation for Medical Research, Health Technology Assessment released *Suicide Prevention Strategies: Evidence from Systematic Reviews*

2003 Alberta Health and Wellness released *Framework for a Healthy Alberta* including targets for suicide prevention

2003 *Alberta Injury Control Strategy* released including targets for suicide prevention

2004 *Blueprint for a Canadian National Suicide Prevention Strategy* released by Canadian Association for Suicide Prevention

2004 *Advancing the Mental Health Agenda: A Provincial Mental Health Plan for Alberta* released including a call for Alberta Mental Health Board to lead the development of a province-wide suicide prevention strategy

2004 Forums held to gather feedback on development of a new provincial suicide prevention strategy

2005 Working Group formed to guide development of the new provincial suicide prevention strategy

2005 Draft *Alberta Suicide Prevention Strategy* distributed to stakeholders for consultation

Appendix C

Summary of Provincial Forums
Development of a Provincial Suicide Prevention Strategy

Introduction

The Provincial Mental Health Plan, *Advancing the Mental Health Agenda*, identifies a role for the AMHB in relation to the development of a province-wide suicide prevention strategy.

Specifically, the Plan states the need to **"Take immediate action to establish a province-wide suicide prevention strategy"**. Suicide is identified as a serious problem in Alberta and the Plan recognizes that "a province-wide suicide prevention strategy targeted at the general population, school aged children and vulnerable populations, especially Aboriginal youth." needs to be developed. The Plan also calls for the Alberta Mental Health Board to work in partnership with key stakeholders to initiate and facilitate the development of a provincial approach for the prevention of suicide.

To begin the collaborative process of development of a Provincial Suicide Prevention Strategy two forums were held in December 2004 to discuss the development of a provincial suicide prevention strategy and to obtain input from across the province.

Overview of Document

This document provides a summary of the feedback obtained through provincial forums. The purpose of the forums and the process used in the forums is described. This is followed by a summary of the input obtained in the sessions. The summary is presented according to the two key areas of discussion: the content of the strategy and the process used to develop the strategy. A detailed account of feedback is contained in an additional document.

Purpose and Process of Forums

Two provincial forums were held in December 2004 to commence the development of an Alberta Suicide Prevention Strategy (ASPS).

Purpose

The Forums were used to bring the stakeholders together to provide them with an overview of the background and the development process and give them an opportunity to provide input into the proposed process and elements to be included in the Alberta Suicide Prevention Strategy. In summary the purpose of the forums was to:

- Raise awareness about the development of an Alberta Suicide Prevention Strategy
- Obtain input about the
  - elements to be included in the strategy
  - overall process
- Gain commitment to the process

Format

The two forums were held: one in Edmonton and one in Calgary. The Edmonton forum was an in-person meeting. The Calgary forum included in-person and video conferencing. This allowed people to participate without having to travel to either Edmonton or Calgary.

Agenda

The same agenda was used for each forum. Information was presented on the background for development of an Alberta Suicide Prevention Strategy and the initial thinking about the overall process for the development. This was followed by an overview of established strategies. Dr. Paul Links who is the President of the Canadian Association for Suicide Prevention and the Arthur Sommer Rotenberg Chair of Suicide Studies at University of Toronto made this presentation. Dr. Links presented on overview of the:

- CASP Blueprint for a Canadian National Suicide Prevention Strategy
- Other National, Provincial and State Strategies and
- Common Elements of Strategies

The remainder of the session focussed on participants' discussion and presentation. Small groups were used for discussion. Participants at the in-person settings were assigned to groups and participants at the videoconferencing sites held discussions at their sites. Three of the sites only included one individual. These individuals reviewed the questions and responded on their own.

Discussion

Participants were asked to discuss the:

1. Application of the common elements for an Alberta Strategy
2. Process for development of an Alberta Strategy

Participants were asked to use the information presented by Dr. Links and in the forum information package on common elements for suicide prevention strategies. They were asked to identify the strengths and facilitators that would help in addressing the common elements within an Alberta Suicide Prevention Strategy and then to identify the barriers that would need to be addressed or would inhibit development of the Strategy.

A draft and condensed version of the Terms of Reference for the Strategy Development Committee was presented to the group. The participants were asked to identify how stakeholders could best provide input into the development of an Alberta Strategy. Specifically they were asked for:

- Suggestions for the membership of a Strategy Development Committee
- Ideas for obtaining broad stakeholder input into the strategy

Participants

A total of 65 people attended the forums. In Edmonton, 22 individuals participated and 43 participated in the Calgary forum. The Calgary session included 12 individuals on-site and 31 through videoconferencing.

All nine health regions, five government departments, and representatives from various other groups participated. Specifically representatives from the following groups were involved:

- AADAC
- AAND
- Alberta Agriculture, Food & Rural Development
- Alberta Centre for Injury Control and Research
- Alberta Children's Services
- Alberta Learning
- AMHB
- Centre for Suicide Prevention
- Chief Medical Examiner
- FNIHB
- Health regions 1 through 9
- LivingWorks
- Schizophrenia Society of Alberta
- University of Alberta

Summary of Feedback

Overall Observations

As a whole the participants were positive about development of an Alberta Strategy but noted the importance of building on initiatives, achievements and existing services and programs that are already in place within Alberta. There was also a sense that given general agreement with the common elements of a suicide prevention strategy, the Alberta Strategy could focus on and move to action in a relatively short time. The participants from the videoconferencing sites examined the questions more from a regional rather than a provincial perspective. This was to be expected as the discussions took place within regional sites and amongst participants from one region.

In examining the strengths and barriers related to applying the common elements many of the strengths have corresponding barriers. These are outlined following the description of the barriers.

Strategy: Common Elements –Strengths & Facilitators

In examining how the common elements of a suicide prevention strategy could be applied within development of an Alberta Suicide Prevention Strategy the participants identified a number of strengths and facilitators for Alberta.

Strengths and facilitators that were identified included:

History

- Alberta's history and accomplishments in the area of suicide prevention put the province in a good position to move forward in the development of a provincial suicide prevention strategy.
- The history can be built upon and will help in determining possible areas of focus for the strategy.

Existing services and programs

- The programs and services that currently exist within Alberta can be built on and enhanced in developing and implementing an Alberta Strategy.
- Along with the programs and services there is a network of providers who recognize the need to work together to address suicide prevention. This network can be used to enhance the development of an Alberta Strategy.
- Prevention & promotion initiatives that are already in place provide a good base to build upon.

Expertise

- Individuals with expertise in the area of suicide prevention and health promotion throughout the province are seen as a strength for development of an Alberta Strategy.
- Alberta also has a good working relationship with experts in other areas of Canada and other jurisdictions and this can benefit the process in Alberta.

Awareness

- Awareness of an issue is the first step in addressing an issue and there is a high level of awareness of suicide and the need for a suicide prevention strategy.
- The recent suicide prevention conference helped to highlight and increase interest and enthusiasm about addressing suicide prevention.

Aboriginal awareness

- Aboriginal communities are aware of the issue and in a general way are willing and able to mobilize to address.
- The Aboriginal Youth Suicide Prevention Strategy which is a cross-ministry effort is already in place and will be evaluated.
- There are other examples of efforts to address suicide prevention within the Aboriginal community.

Research

- Research has been done in Alberta and can be used to support the development of an Alberta Strategy.
- The available research resources in Alberta will be an asset to the development of and to the strategy.

Broad Focus

- There is recognition that suicide prevention is more than a mental

	health issue and requires the involvement of a broad range of providers, policy makers, and individuals. ■ Awareness of the need to take the issue beyond mental health and health will allow for development of a more comprehensive and potentially more effective strategy.
Health Determinants	■ There is recognition of the importance of addressing health determinants in developing an Alberta Strategy . ■ There is recognition of the shared responsibility for suicide prevention and the need to get suicide prevention on the agendas of the groups that already exist on such things as housing, employment, income support, social planning, etc.
National Blueprint	■ Having the National Blueprint available as a guide for development will benefit the process. ■ There is general agreement with the common elements contained in the Blueprint to set direction for an Alberta Strategy.
Regional Approaches	■ Regional collaboration that is in place will help to facilitate the development of the strategy and will help in the implementation stages as well. ■ Generally there is a good level of co-operation amongst different providers within the regions. ■ Regional committees that do exist will be able to facilitate development and implementation of a strategy.
Multi-Sectoral Involvement	■ There is collaboration across the various sectors of government and services systems which will help in developing and implementing an Alberta Strategy. ■ Links between mental health and areas such as injury prevention are important. ■ Other links are already established and/or could be expanded.
Knowledge about high risk groups	■ There is a need to target high risk groups and there is currently good knowledge about the high risk groups.
Common Messaging/Media	■ Alberta has examples of common messaging that are effective, these can be enhanced and built on for suicide prevention. ■ Media have shown some indication that they are willing to co-operate and learn appropriate methods of reporting and of being involved.

Economic means	▪ There is a perception that the province has the economic means to be able to provide additional resources to address the issue.

Strategy: Common Elements –Barriers

In examining how the common elements of a suicide prevention strategy could be applied within development of an Alberta Suicide Prevention Strategy the participants identified a number of barriers that may impact the development of an Alberta Strategy.

Barriers that were identified included:

Resources	▪ There is a need for new resources to support suicide prevention; this includes both dedicated and enhanced human resources as well as new dollars to support action. ▪ There is a perception that there is no political will to enhance resources to enable action in the area of suicide prevention. ▪ Human resources are not generally available in rural and remote areas.
Stigma	▪ There is a need for continued efforts to deal with the stigma of mental illness and of seeking help for mental health issues. ▪ There is a need to recognize that suicide is not just an issue for people with a mental illness or for the mental health system.
Breadth of Impact	▪ There is awareness and recognition that this is more than a mental health issue and one that requires the involvement of a broad range of policy makers, providers, and individuals. This awareness has the potential to positively impact suicide prevention however it is difficult to involve all the players in the development and to have the plan put into action. This requires efforts to work together that may not have been tried previously. ▪ FOIPPA issues impede providers from different areas of government or service system from working together to serve individuals. ▪ Acknowledgement by one of the groups that there is a lack of genuine concern for fellow man and that the "good neighbour" approach may be helpful in addressing suicide prevention.
Focus on health determinants	▪ Difficult to focus on health determinants in practice. ▪ It is perceived that there is no political will to address determinants of health in a way that will actually have an impact of health and mental health including suicide prevention. ▪ Focusing on health determinants involves many players and there is lack of history in being effective in working together.

	■ Focus is currently on tertiary services rather than prevention or promotion of health.
Inventory of Programs and Services	■ Providers do not know enough about what is available or who does what in the area of suicide prevention. ■ Individuals who require service have a difficult time accessing appropriate resources. ■ Having an inventory may be useful in improving access to services.
Community Support	■ There is a major disconnect between policy and planning at the government level and ground level delivery of services. ■ Support for communities who are impacted and need resources is required.
Access to services	■ Seamless, welcoming, and available services and support are needed for suicide prevention and are not always available. ■ Individuals require a continuum of care and follow-up services as well.
Best Practice/Research	■ There is a need for information about best practice in suicide prevention that is up-to-date and useful. ■ Research/data needs to be more timely. ■ Have to deal with inconsistencies in reporting on suicides.
Geography of Alberta	■ Difficult to provide services in all areas of the province and particularly in rural and remote areas.
Media Issues	■ Need to work with the media to reduce examples of uninformed media coverage of suicide, e.g. "psycho kills three."

Strategy: Common Elements -Summary

A number of factors that are considered strengths are also considered to be barriers. These include:

- Breadth of Focus
- Existing Services
- Focus on Health Determinants
- Research
- Media

Process: Committee Representation

The draft condensed Terms of Reference for the Strategy Development Committee was presented to the participants for information. One small group had some questions about the model that was being used for the Committee and specifically if it was meant to be a Steering Committee or a group of experts. They noted that they thought that the strategy should be developed by an expert or panel of experts while the Strategy Development Committee must work as a Steering Committee to ensure that stakeholders are included and to ensure that the experts(s) use a good process.

Specific feedback about the membership of the Committee was as follows:

- Various ministries including those not traditionally involved:
  - AADAC
  - Aboriginal Affairs and Northern Development
  - Advanced Education
  - Agriculture, Food and Rural Development
  - Alberta Health and Wellness
  - AMHB
  - Children's Services
  - Community Development
  - Education
  - Human Resources and Employment
  - Infrastructure and Transportation
  - Justice and Attorney General
  - Seniors and Community Supports
  - Solicitor General
  - Federal (FNIHB)
- Aboriginal Representation including urban, rural and reserves
- Suicide prevention specialists and their committees including:
  - Research Representatives
  - Injury Prevention specialists
  - Health promotion specialists
- Existing and related initiatives/groups
  - ACYI (Aboriginal Youth Suicide Prevention)
  - Aboriginal Suicide Prevention Coalition
  - ACICR (Alberta Centre for Injury Control and Research)
  - Centre for Suicide Prevention
  - Family Violence (provincial and regional)
- Consumers, Clients, Survivors including public representation for high risk groups
- Professional associations
- Community agencies
- Healthcare and other service providers including:
  - Physicians & psychiatrists
  - Emergency providers- police and EMS
  - Medical Examiners Office

- Industry
- Media

Process: Stakeholder Input

Community Development Approach

There was general consensus that a community development process should be used to obtain broad stakeholder input. Specifically, having a draft strategy developed and then taken out to communities was seen as the ideal approach. It was recommended that the consultation involve representation from a variety of community members, not just the traditional stakeholders within community. Ideas about types of individuals included the types of individuals and groups identified as potential members for the Strategy Development Committee as well as youth, school representatives, seniors, members of high risk groups, survivors, business, industry, and municipal government representatives. Including representatives from policy/research/provider perspectives and representatives who have a community/life experience perspective was also seen as important. Having communities or regions help to design the specific approach that would work for their area was also suggested. Other ideas related to community consultation included pairing an education session with input gathering sessions or holding telehealth sessions as a way to obtain input. Provision of travel resources was noted as a way to increase the ability of a variety of stakeholders to participate.

Access existing meetings/groups

Participation by inter-sectoral groups and representatives is seen as critical to the successful development and implementation of an Alberta Suicide Prevention Strategy. One way to increase input from a variety of sectors is to access existing groups of meetings that include multi-sectoral representatives. Examples of these groups include:

- ACYI (Aboriginal Youth Suicide Prevention)
- Aboriginal Suicide Prevention Coalition
- ACICR (Alberta Centre for Injury Control and Research)
- Centre for Suicide Prevention
- Family Violence (provincial and regional
- Regional Committees

Use technology to gather input

Use telehealth, videoconferencing and the internet to increase input into the strategy. This could be done in a number of different ways and at different times. Technology could also be used to provide advance communication to communities to increase participation in consultation meetings.

Learn from completed suicides

The opportunity to learn from completed suicides and to examine communities where rates are high as well as those where rates are low was noted. Analysis in this area is seen to have potential to identify actions that could be included in the strategy.

Summation

The feedback from the forums highlighted a broad range of providers and individuals interested in pursuing the efforts to prevent suicide. There is a recognition and awareness of the issue, acknowledgement of the initiatives and services that could be built upon and enthusiasm to move forward towards action.

Appendix D

Summaries of Strategic Documents Relevant to the Alberta Suicide Prevention Strategy

Document 1. Provincial Mental Health Plan: Advancing the Mental Health Agenda

Document 2. Canadian Association for Suicide Prevention: Blueprint for a Canadian National Prevention Strategy

Document 3. Centre for Suicide Prevention: National Suicide Prevention Strategies

Document 4. Framework for a Healthy Alberta

Document 5. Alberta Injury Control Strategy

Document 6. Aboriginal Youth Suicide Prevention Strategy

Document 7. Aboriginal Suicide Prevention Coalition

Background Document #1

Document Name	***Provincial Mental Health Plan: Advancing the Mental Health Agenda***
Author/Group	Provincial Mental Health Plan Steering Committee
Overview	The Provincial Mental Health Plan, *Advancing the Mental Health Agenda*, sets a new direction for the future of mental health services in Alberta. This direction will see mental health services integrated into the overall health care system of the province. In addition the plan calls for action to address the many gaps in mental health services today. The Plan provides a vision for the future and ▪ outlines who should do what ▪ what services are required ▪ how programs and services should be funded ▪ how to ensure that there is an adequate supply of highly trained mental health workers ▪ how to use research to guide future development and ▪ how to track progress and results. **The Provincial Mental Health Plan Implementation Steering Committee** has been established to guide the implementation of the Plan.
Relevance to Alberta Suicide Prevention Strategy	One of the Implementation Priorities in the Plan is: ***"Take immediate action to establish a province-wide suicide prevention strategy"*** Suicide is a serious problem in Alberta and work should begin immediately on a province-wide suicide prevention strategy targeted at the general population, school aged children and vulnerable populations, especially Aboriginal youth." (p. 63 PMHP) The Plan identifies a role for the AMHB in relation to the development of a province-wide suicide prevention strategy. "Consistent with its role in selected province-wide prevention and promotion initiatives, the Alberta Mental Health Board in partnership with regional health authorities, and in collaboration with Health and Wellness and other key stakeholders, should initiate and facilitate the development of a provincial approach for the prevention of suicide." (p. 23, PMHP) **This implementation priority provides the impetus for the development of the Alberta Suicide Prevention Strategy.**
Web Resource	www.amhb.ab.ca

Background Document #2

Document Name	***CASP Blueprint for a Canadian National Suicide Prevention Strategy***
Author/Group	Canadian Association for Suicide Prevention
Overview	The Canadian Association for Suicide Prevention (CASP) presented the "Blueprint for a Canadian National Suicide Prevention Strategy" on October 21, 2004 at the CASP Conference in Edmonton, Alberta. The National Strategy would serve "to unite all communities, organizations and resources across Canada with CASP and our stakeholders to work effectively together to prevent death by suicide and to assist, educate and comfort those who have been impacted by suicidal behaviours." The Blueprint notes that " *In the past three decades more than 100,000 Canadians died by suicide. These deaths include our children and our parents, our family members, our friends, our neighbours and people from all socio-economic, age, gender, culture and ethnic groups. No part of our society is immune. Suicide affects all of us. It remains among Canada's most serious public health issues."* *"For too long, discussion of suicide has involved secrecy, stigma and taboo. Through our silence, and fuelled by our fears, ignorance has resulted in much suffering. Now is the time to confront the silence. We must all be willing to learn. We must all be willing to educate ourselves and become ready to move into action to prevent suicide and to comfort the suffering"* *"Many countries have developed or are developing national strategies to reduce suicide and minimize its impact. It is now Canada's turn."* The Blueprint identifies Goals and Objectives in four main areas: • Awareness & Understanding • Prevention & Intervention • Knowledge Development & Transfer • Funding & Support
Relevance to Alberta Suicide Prevention Strategy	**The Blueprint provides a useful direction to consider in the development of the Alberta Suicide Prevention Strategy.**
Web Resource	www.suicideprevention.ca

Background Document #3

Document Name	***Centre For Suicide Prevention: National Suicide Prevention Strategies***
Author/Group	Centre For Suicide Prevention
Overview	The document outlines that "according to the World Health Organization (2002) suicide is the leading cause of death worldwide. Globally, an estimated 815,000 people died by suicide in 2000. This number translates into one suicide death every 40 seconds. Each year, approximately 4,000 Canadians die by suicide." Many countries have developed a suicide prevention strategy. Several common elements that can be found in the national strategies include: • **Public Awareness** campaigns to increase awareness of suicide as a problem that is preventable; to develop broad-based support for prevention efforts; to reduce stigma. • Community Development to support development and implementation of suicide prevention programs • **Access to Services** to improve services to suicidal people and their loved ones; to support service delivery effort through development of guidelines and linkages • **Media Education** to improve reporting and portrayals of suicide in the media • **Training** for caregivers to improve recognition of at-risk behaviour and delivery of effective treatments; incorporation of licensing standards for professional caregivers; development and promotion of effective clinical and professional practices • **Means Restriction** initiatives to reduce access to lethal means and methods of self-harm • **Research and Evaluation** to promote and support research; improve surveillance systems; to evaluate the effectiveness of new or existing suicide prevention interventions
Relevance to Alberta Suicide Prevention Strategy	**The common elements noted in many national, state and provincial strategies and summarized in this document can be used to support the development of the Alberta Suicide Prevention Strategy.**
Web Resource	www.suicideinfo.ca

Background Document #4

Document Name	***Framework for a Healthy Alberta***
Author/Group	Government of Alberta: Alberta Health and Wellness
Overview	The Premier's Advisory Council on Health called on the Government of Alberta to set clear objectives and targets for heath for the next ten years and to track progress towards those targets. The *Framework for a Healthy Alberta* sets outcomes and targets for government action to promote health and prevent disease and injury to the year 2012. The two outcomes are: *Outcome 1: Improve healthy behaviour* *Outcome 2: Reduce chronic disease* The Framework builds on a foundation of Government initiatives such as the Alberta Child and Youth Initiatives, the Low Income Review, The Youth Employment Strategy, the Parent Child Literacy Project, the Aboriginal Policy Framework, the Alberta Diabetes Strategy and the Alberta Tobacco Reduction Strategy. Each of these initiatives has examined health determinants. It is hoped that by 2012 more Albertans will have taken steps to become healthy and therefore will be less likely to develop heart disease, cancer, lung disease, diabetes and other serious illnesses and have fewer injuries.
Relevance to Alberta Suicide Prevention Strategy	Outcome #1: **Improve healthy behaviours** Objective #1.5 **More Albertans take steps to prevent injury** Target: "*Reduce the mortality rate due to suicide, from 15.2 to 12.3 per 100,000 people*". The specific government strategies noted are: • Implement the Aboriginal Youth Suicide Prevention Framework • Implement province-wide suicide prevention strategies focused on early identification, increased awareness, understanding stress and crisis management **These targets will be considered in the development of the Alberta Suicide Prevention Strategy**
Web Resource	**http://www.health.gov.ab.ca/about/reform/pdf/Framework.pdf**

Background Document #5

Document Name	***Alberta Injury Control Strategy***
Author/Group	Alberta Injury Control Strategy Advisory Committee
Overview	The Alberta Injury Control Strategy states that injuries are the leading cause of death for Albertans age 44 and under and that Alberta has one of the highest injury rates in Canada. In the spring of 2002, The Alberta Centre for Injury Control & Research (ACICR) initiated, facilitated and funded the *Alberta Injury Control Strategy* to develop a provincial strategy for injury control. With the vision of "Making Alberta the Safest Place to Live", the Strategy sets out seven strategic goals with specific objectives and recommended actions. The Strategic goals are as follows: 1. Increase the awareness and commitment of Albertans to injury prevention 2. Promote the development and enforcement of healthy public policies and legislation aimed at injury prevention 3. Build and sustain the capacity and capability to deliver effective injury prevention programs 4. Increase the availability of and access to comprehensive provincial injury surveillance data 5. Increase research and program evaluation in injury causes, injury programs and practices 6. Optimize emergency response, acute care and rehabilitation services to those who are affected by injury 7. Strengthen partnerships among injury control stakeholders The *Alberta Injury Control Strategy* also outlines five implementation recommendations seen as key to the successful implementation of the Strategy. The **Alberta Injury Control Alliance**, which was established as a result of the Strategy, invites injury control stakeholders to formally support and endorse the Strategy by becoming members of the Alliance and joining co-ordinated provincial efforts to "make Alberta the safest place to live."
Relevance to Alberta Suicide Prevention Strategy	Objective 1.2 "*Albertans will take actions to reduce the major causes of injury*" specifies targets related to suicide. These include: ▪ Reducing the suicide/self-inflicted mortality rate from 15.2 to 12.3 per 100,000 ▪ Improving on current status of hospitalization rate for suicide/self-inflicted injuries ▪ Improving on current status of emergency visit rate for suicide/self-inflicted injuries In addition, as part of Objective 1.2 a recommended action is *"To implement and build on existing and proposed injury control strategies such as .....Alberta Suicide Prevention Strategy."* **The Strategic Goals, objectives and targets that focus on suicide prevention will be considered in the development of the Alberta Suicide Prevention Strategy**
Web Resource	www.med.uablerta.ca/acicr

Background Document #6

Document Name	***Aboriginal Youth Suicide Prevention Strategy***
Author/Group	Alberta Children and Youth Initiative: Aboriginal Youth Suicide Prevention Strategy Working Group
Overview	Four objectives/strategies have been identified as part of the Aboriginal Youth Suicide Prevention Strategy. These include: 1. Support communities to identify strengths and build capacity to prevent youth suicide 2. Support a province-wide education and training implementation plan 3. Develop awareness and education strategies with communities to prevent youth suicide 4. Establish partnerships to support research and program evaluation to inform future planning
Relevance to Alberta Suicide Prevention Strategy	**The objectives and strategies outlined in the Aboriginal Youth Suicide Prevention Strategy will be considered in the development of the Alberta Suicide Prevention Strategy**

Background Document #7

Document Name	***Aboriginal Suicide Prevention Coalition***
Author/Group	The Aboriginal Suicide Prevention Coalition includes government and non-government organizations that developed as a coalition in response to communities requesting leadership and support to build and share strategies to address suicide impacting Aboriginal Peoples in Alberta.
Overview	The purpose of the Coalition is to facilitate a collaborative process between stakeholders in order to develop strategies to address suicide prevention with Aboriginal Peoples in Alberta. The coalition will champion efforts with communities, agencies and government working together. Four objectives have been identified as part of the Aboriginal Suicide Prevention Coalition Activity Plan for 2004-2006. These include: • Based on best evidence available, promote strategies and outcome and process measures for primary prevention, early intervention & secondary prevention and postvention • Promote collaborative and effective relationships through ongoing communication and liaison with numerous stakeholders • Develop communication strategies to facilitate the sharing of knowledge between communities, agencies, governments and a central library • Facilitate research and program evaluation addressing identification of factors associated with suicide impacting Aboriginal Peoples and the effectiveness of the various strategies used to address suicide prevention
Relevance to Alberta Suicide Prevention Strategy	**The objectives outlined by in the Aboriginal Suicide Prevention Coalition will be considered in the development of the Alberta Suicide Prevention Strategy**

Appendix E

Community Consultation Process

In May 2005, Alberta Mental Health Board circulated draft versions of the *Alberta Suicide Prevention Strategy* and accompanying Appendices for feedback from stakeholders. The goal of the community consultation process was to obtain feedback on the following issues:

- Whether the draft was comprehensive and complete, what other information should be included.
- Priority groups
- Priority of the goals and objectives
- Readability and clarity
- How the strategy could be used to support the reviewers' work
- Additional comments

The drafts were distributed to more than 200 individuals representing the following sectors:

- Provincial Ministries
- Professional associations
- Suicide and mental health-related associations
- Participants at the Suicide Prevention Strategy Forums held in December 2004
- Regional Health Authority Chief Executive Officers, Mental Health Leads, Mental Health Promotion Contacts
- Regional Suicide Prevention Contacts
- Survivor Groups
- Committees:
  - Alberta Alliance on Mental Illness and Mental Health
  - Alberta Children & Youth Initiatives Steering Committee
  - Aboriginal Suicide Prevention Coalition Steering Committee
  - Alberta Suicide Prevention Strategy Working Group Members and cc list
  - AMHB Aboriginal Mental Health Wisdom Committee
  - Aboriginal Youth Suicide Prevention Strategy Working Group and pilot sites

Over 45 detailed responses were received which reflected the feedback of countless more since many responses were sent on behalf of committees, groups and organizations.

Appendix F

Framework for Implementing a Suicide Prevention Strategy

The following framework summarizes how the strategies will be implemented and provides an overview of the *Alberta Suicide Prevention Strategy* (see following page). The framework is adapted from a model in *Aboriginal Youth: A Manual of Promising Suicide Prevention Strategies* (White and Jodoin, 2003).

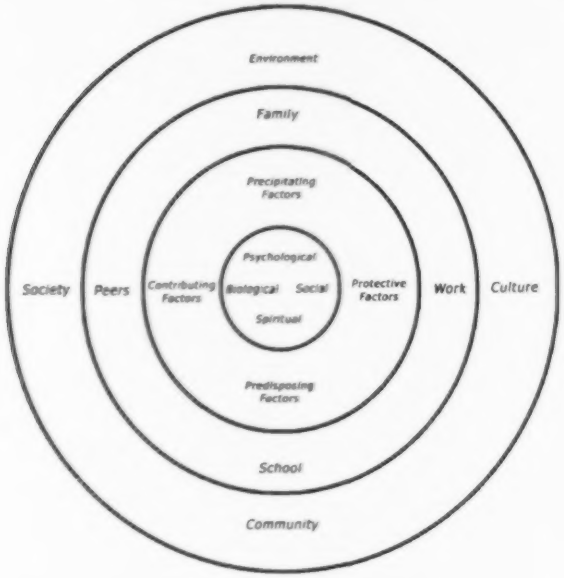
Framework for Implementing a Suicide Prevention Strategy

Key Strategies	Mental Health Promotion	Intervention			Postvention
	Quality Management				
Primary Target Group	Populations and Target Groups	Groups at Early Risk	Individuals at Identifiable Risk	Individuals at Urgent Risk	Populations and Groups
Level of Suicide Risk	Unknown	Low Risk	Medium Risk	High Risk	Low to High Risk
Type of Intervention	Mental health promotion	Early intervention	Treatment	Crisis intervention	Crisis intervention and follow-up
Key Factors of Influence	Protective factors	Predisposing and contributing factors		Precipitating factors	All factors depending on need
Types of Activities	▪ Cultural enhancement ▪ Community development ▪ School climate improvement ▪ Organizational policy ▪ Generic skill building ▪ Suicide awareness education ▪ Media education ▪ Resiliency ▪ Means restriction ▪ Take positive action on the determinants of health	▪ Traditional healing practices ▪ Gatekeeper training ▪ Screening ▪ Means restriction	▪ Support groups ▪ Treatment ▪ Traditional healing practices ▪ Means restriction	▪ Crisis lines ▪ Traditional healing practices ▪ Means restriction	▪ Crisis lines ▪ Support groups ▪ Education for first responders ▪ Traditional healing practices ▪ Means restriction
Intermediate Indicators of Progress	TBD	TBD	TBD	TBD	TBD
Ultimate Outcome	**Reduced suicides and suicidal behaviour**				

Appendix G

Alberta Suicide Prevention Strategy Model

Layers of Influence Model



Models provide a helpful and quick way for understanding fairly complex issues and problems, like suicide and suicidal behaviour. Good prevention models show, usually at a glance, the main characteristics of an issue or problem and they suggest how, when and where to focus our prevention efforts. Good models are generally straightforward and the concepts can usually be put into practice quite easily. In other words, good models show us the "lay of the land" and suggest some of the best routes for getting us to our destination. In this case, our goal is to reduce suicide and suicidal behaviour in Alberta.

A good model is not, on the other hand, a mirror of the real world. Instead, a model stands as a symbol of our current knowledge or understanding of the world, shedding light on potential ways to make a difference. Models should not be seen as set in stone, nor should they be so complicated that it takes forever to understand their basic parts.

We know that suicide amongst Albertans is caused by multiple factors, which means that no one single solution exists. Individual, family, social and cultural factors all play a role. In fact, even though the focus of the Alberta Suicide Prevention Strategy is suicide, many of the recommended strategies could just as easily apply to the prevention of other social problems.

Multiple Layers of Influence

Suicide and suicidal behaviour do not take place in a vacuum. Instead, suicide takes place when several factors interact with one another over time and across a number of contexts. One way to appreciate the numerous factors that lead to suicide is to show them through a diagram.

That way, we can begin to see the many layers of human experience and the range of social conditions that can potentially influence an individual's choice to die by suicide.

The Layers of Influence Model is one such diagram. It shows the individual at the centre which includes psychological, biological, social and spiritual dimensions. The individual is surrounded by other layers representing family, peers, work, school, community, culture, society, and the environment. Each layers represents a source of potential risk or protection. Basically, this model serves to remind us of the complexity of suicide and the number of influences that must be taken into account when trying to understand and prevent it.

Four types of factors

There are four types of risk and protective factors that we need to be familiar with in order to understand suicide and suicidal behaviour:

1. *Predisposing factors* set the stage for a vulnerability to suicide
2. *Contributing factors* exacerbate the existing risk
3. *Precipitating factors* act as a trigger for predisposed persons
4. *Protective factors* lessen the risk for suicide

It is important to remember that the first three types of factors represent what we call risk factors because they serve to increase the risk for suicide, while protective factors act to reduce the risk.

The Model illustrates that each of the four types of factors, in interaction with one another and across a number of settings, creates conditions leading to suicide and suicidal behaviour. Suicidal behaviour does not follow a straight line or predictable path. In reality there are several possible routes leading to self-destructive behaviour; however, we can do something to reduce risks and our challenge is to determine the best points for intervention in order to strengthen the protective factors and interrupt the various pathways to suicide.

The Layers of Influence Model and above text was adapted with permission from *Aboriginal Youth: A Manual of Promising Suicide Prevention Strategies* (White and Jodoin, 2003).

Appendix H

Alberta Suicide Prevention Strategy - Principles

1. Establishing effective strategies is a shared responsibility across communities, regions, provincial organizations, professions, and government sectors. Strategies will therefore support and facilitate community participation in taking action, and will strive toward achieving a balance between "bottom up" and "top down" initiatives to maximize ownership and commitment by all parties.

2. Suicide prevention requires a continuum of combined, proven strategies and a diversity of approaches. The higher the level of risk for a particular population, the more intensive the prevention efforts will be. Strategies and approaches will be guided by a conceptual framework and:

    a) appropriately balanced between more immediate action strategies that promote positive mental health, enhance protective factors, and take action to reduce risk and known suicide antecedents, and strategies that focus on intervention and postvention; and
    b) longer-term strategies targeting the whole population, specific population subgroups, and individuals at risk.

3. Suicide prevention strategies and approaches will be active, informed, evidence-based, and reflective of evolving knowledge and practices; however, innovation will also be encouraged and supported.

4. Suicide prevention strategies and approaches will be accessible to those who need them, respectful of diversity, and sensitive to the dignity of individuals, families and communities, irrespective of cultural identity, social status, gender, age, ethnicity, sexual orientation, or diagnosis. Family-focused strategies will be encouraged. Community and culture-based knowledge will be incorporated.

5. Suicide prevention strategies and approaches related to Aboriginal people will be developed in partnership with communities to ensure that strategies reflect Aboriginal linguistic and historical legacy, cultural protocols, ethics, beliefs, and ways of knowing.

6. Continuous quality improvement through research, surveillance and evaluation will be an integral part of the *Alberta Suicide Prevention Strategy*, and inclusion of these activities will be an expectation at both the regional/local and provincial level.

7. Strategic partnerships, linkages and collaboration are required at both the regional/local, provincial and national levels in order to fully engage individuals, families, communities, and organizations in suicide prevention and mental health promotion; maximize commitment; and avoid duplication.

ALBERTA SUICIDE PREVENTION STRATEGY

Background Information
October 2005

AMHB
ALBERTA MENTAL HEALTH BOARD
...Advancing Mental Health

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Understanding and Preventing Suicidal Behaviour

In order to understand how to prevent suicide on a province-wide strategic level, we must understand what factors influence suicidal behaviour at individual, family, community and system-wide levels.

In general, there are four types of risk and protective factors for suicidal behavior.

Risk Factors	1. *Predisposing factors* set the stage for a vulnerability to suicide 2. *Contributing factors* exacerbate the existing risk 3. *Precipitating factors* act as a trigger for predisposed persons
Protective Factors	4. *Protective factors* lessen the risk for suicide

The information in the table above has been adapted with permission from: *Youth Suicide Prevention: A Framework for British Columbia*, Suicide Prevention Information and Resource Centre for British Columbia (White, 1998).

Risk Factors

Suicide involves a process in which a number of variables contribute to produce an end result. Most authorities believe that the presence of one of these factors alone does not cause suicide, but that a combination of a number of factors may influence the decision to take one's life.

The following list of risk factors has been adapted from: *Suicide In Canada: Update on the Report of the Task Force on Suicide in Canada*, Health Canada (1994).

1. Sociological, Economic and Cultural Factors

There are a wide range of sociological, economic and cultural factors, which influence suicide and suicidal behaviour. Social attitudes that are permissive toward suicide play a role, as well as a physical environment that facilitates suicide, such as readily available guns. People who are socially isolated from peers are at higher risk of suicidal behaviour. There also appears to be a relationship between suicide and unemployment and income. Cultural factors which influence suicide and suicidal behaviour include experiencing racism, belonging to a disadvantaged or oppressed group or belonging to a group with permissive attitudes toward suicide.

2. Psychiatric and Neurobiological Factors

People with psychiatric conditions face a higher risk of suicide than the general population. Experiencing severe hopelessness, a lost capacity for enjoyment, or extreme anxiety has been linked to suicidal behavior. In particular, conditions such as depression and schizophrenia have been linked with suicide. The extent to which neurobiological factors influence suicidal behaviour is unknown. Some studies have

shown that a deficiency of serotonin levels is found in suicide cases that involve depression, schizophrenia, borderline and antisocial personality disorders.

3. Addictions

There is evidence that the effects of a variety of addictions may influence suicide. Addictions to alcohol, drugs or activities such as gambling have been linked to an increased risk of suicide.

4. Genetic and Family Background

There is evidence that suicide tends to run in families which has resulted in a debate about whether or not it is a genetic factor. Many researchers believe that some conditions which predispose one to suicide may be inheritable, but others are actively researching a possible genetic factor. It is also believed that individuals may be more prone to suicidal behaviour if others in their family have modeled this behaviour. Other family factors such as a poor relationship with parents, the death of a parent, or the previous suicide of a family member are also associated with suicidal behaviour.

5. Life Events

Experiencing major and stressful life events such as a loss, interpersonal conflict, or serious illness in the family is associated with suicide. Life events are an even greater risk factor for those who were previously vulnerable because of a mental illness or existing stressors.

6. Chronic or Terminal Illness

As with all risk factors, terminal illness is not believed to be a sole cause for suicide. Suicidal risk may be elevated by physical pain, psychological pain, social isolation and other factors related to being terminally or chronically ill such as a realization that the suffering will not end.

7. Personality and Psychological Influences

The risk of suicidal behaviour may be greater if the individual has personal characteristics such as negative attitudes about the self or is prone to impulsive or aggressive action. Those with low levels of optimism, mastery, and self-efficacy may be at increased risk of suicide. The lack of positive coping strategies and the use of negative ones is an important risk factor for suicidal behaviour.

Protective Factors

There are a number of factors which appear to reduce the risk of suicide. These factors are often called "protective factors." One way of understanding protective factors is by examining the Determinants of Health. These are broad categories of issues that research demonstrates are influential in determining health.

The following information is quoted from the Public Health Agency of Canada website at: http://www.phac-aspc.gc.ca/ph-sp/phdd/determinants/determinants.html#income.

1. Income and Social Status

Health status improves at each step up the income and social hierarchy. High income determines living conditions such as safe housing and ability to buy sufficient good food. The healthiest populations are those in societies which are prosperous and have an equitable distribution of wealth.

Why are higher income and social status associated with better health? If it were just a matter of the poorest and lowest status groups having poor health, the explanation could be things like poor living conditions. But the effect occurs all across the socio-economic spectrum. Considerable research indicates that the degree of control people have over life circumstances, especially stressful situations, and their discretion to act are the key influences. Higher income and status generally results in more control and discretion. And the biological pathways for how this could happen are becoming better understood. A number of recent studies show that limited options and poor coping skills for dealing with stress increase vulnerability to a range of diseases through pathways that involve the immune and hormonal systems.

2. Social Support Networks

Support from families, friends and communities is associated with better health. Such social support networks could be very important in helping people solve problems and deal with adversity, as well as in maintaining a sense of mastery and control over life circumstances. The caring and respect that occurs in social relationships, and the resulting sense of satisfaction and well-being, seem to act as a buffer against health problems.

In the 1996-97 National Population Health Survey (NPHS), more than four out of five Canadians reported that they had someone to confide in, someone they could count on in a crisis, someone they could count on for advice and someone who makes them feel loved and cared for. Similarly, in the 1994-95 National Longitudinal Survey of Children and Youth, children aged 10 and 11 reported a strong tendency toward positive social behaviour and caring for others.

3. Education and Literacy

Health status improves with level of education. Education is closely tied to socioeconomic status, and effective education for children and lifelong learning for adults are key contributors to health and prosperity for individuals, and for the country. Education contributes to health and prosperity by equipping people with knowledge and skills for problem solving, and helps provide a sense of control and mastery over life circumstances. It increases opportunities for job and income security, and job satisfaction. And it improves people's ability to access and understand information to help keep them healthy.

4. Employment/Working Conditions

Unemployment, underemployment, stressful or unsafe work are associated with poorer health. People who have more control over their work circumstances and fewer stress related demands of the job are healthier and often live longer than those in more stressful or riskier work and activities.

5. Social Environments

The importance of social support also extends to the broader community. Civic vitality refers to the strength of social networks within a community, region, province or country. It is reflected in the institutions, organizations and informal giving practices that people create to share resources and build attachments with others.

The array of values and norms of a society influence in varying ways the health and well being of individuals and populations. In addition, social stability, recognition of diversity, safety, good working relationships, and cohesive communities provide a supportive society that reduces or avoids many potential risks to good health. A healthy lifestyle can be thought of as a broad description of people's behaviour in three inter-related dimensions: individuals; individuals within their social environments (e.g. family, peers, community, workplace); the relation between individuals and their social environment. Interventions to improve health through lifestyle choices can use comprehensive approaches that address health as a social or community (i.e. shared) issue. Social or community responses can add resources to an individual's repertoire of strategies to cope with changes and foster health.

6. Physical Environments

The physical environment is an important determinant of health. At certain levels of exposure, contaminants in our air, water, food and soil can cause a variety of adverse health effects, including cancer, birth defects, respiratory illness and gastrointestinal ailments.

In the built environment, factors related to housing, indoor air quality, and the design of communities and transportation systems can significantly influence our physical and psychological well-being.

7. Personal Health Practices and Coping Skills

Personal Health Practices and Coping Skills refer to those actions by which individuals can prevent diseases and promote self-care, cope with challenges, and develop self-reliance, solve problems and make choices that enhance health.

Definitions of lifestyle include not only individual choices, but also the influence of social, economic, and environmental factors on the decisions people make about their health. There is a growing recognition that personal life "choices" are greatly influenced by the socioeconomic environments in which people live, learn, work and play.

These influences impact lifestyle choice through at least five areas: personal life skills, stress, culture, social relationships and belonging, and a sense of control. Interventions that support the creation of supportive environments will enhance the capacity of individuals to make healthy lifestyle choices in a world where many choices are possible.

Through research in areas such as heart disease and disadvantaged childhood, there is more evidence that powerful biochemical and physiological pathways link the individual socio-economic experience to vascular conditions and other adverse health events.

However, there is a growing recognition that personal life "choices" are greatly influenced by the socioeconomic environments in which people live, learn, work and play.

8. Healthy Child Development

New evidence on the effects of early experiences on brain development, school readiness and health in later life has sparked a growing consensus about early child development as a powerful determinant of health in its own right. At the same time, we have been learning more about how all of the other determinants of health affect the physical, social, mental, emotional and spiritual development of children and youth. For example, a young person's development is greatly affected by his or her housing and neighbourhood, family income and level of parents' education, access to nutritious foods and physical recreation, genetic makeup and access to dental and medical care.

9. Biology and Genetic Endowment

The basic biology and organic make-up of the human body are a fundamental determinant of health.

Genetic endowment provides an inherited predisposition to a wide range of individual responses that affect health status. Although socio-economic and environmental factors are important determinants of overall health, in some circumstances genetic endowment appears to predispose certain individuals to particular diseases or health problems.

10. Health Services

Health services, particularly those designed to maintain and promote health, to prevent disease, and to restore health and function contribute to population health. The health services continuum of care includes treatment and secondary prevention.

11. Gender

Gender refers to the array of society-determined roles, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes on a differential basis.

"Gendered" norms influence the health system's practices and priorities. Many health issues are a function of gender-based social status or roles.

12. Culture

Some persons or groups may face additional health risks due to a socio-economic environment, which is largely determined by dominant cultural values that contribute to the perpetuation of conditions such as marginalization, stigmatization, loss or devaluation of language and culture and lack of access to culturally appropriate health care and services.

There are a number of additional factors specific to suicide that appear to provide protection. Although these may fit within the Determinants of Health described above,

some examples are highlighted below. These examples are extracted from the Australian suicide prevention strategy.

- Belief that suicide is wrong.
- Strong spiritual or religious faith or a sense of meaning and purpose to life.
- Early identification and appropriate treatment of psychiatric illness.
- Lack of access to guns in the house.

Reference: Commonwealth of Australia (2000) *LIFE Living is for everyone: A framework for prevention of suicide and self-harm in Australia. Areas for Action.* Canberra, Australian Capital Territory: Commonwealth Department of Health and Aged Care.

The following table (see next page) provides a number of examples of risk and protective factors presented in the context of individuals and the various potential sources of influence (i.e. family, peers, school or work, community and culture).

The table is adapted from: *Aboriginal Youth: A Manual of Promising Suicide Prevention Strategies* (White and Jodoin, 2003).

Predisposing Factors	Contributing Factors	Precipitating Factors	Protective Factors
Individual			
▪ Previous history of a suicide attempt ▪ Depression/psychiatric disorder ▪ Prolonged or unresolved grief	▪ Rigid cognitive style ▪ Poor coping skills ▪ Alcohol and substance abuse ▪ Sexual orientation being "two-spirited" ▪ Impulsivity ▪ Hypersensitivity ▪ Low self-esteem ▪ Self perception of poor general health ▪ Conflict with the law	▪ Personal failure ▪ Humiliation ▪ Individual trauma ▪ Developmental crisis	▪ Good physical and mental health ▪ Creative problem-solving ▪ Personal autonomy ▪ Previous experience with self-mastery ▪ Optimistic outlook ▪ Sense of humour ▪ Strong spiritual or religious faith
Family			
▪ Family history of suicidal behaviour/completed suicide ▪ Family violence/abuse ▪ Family history of mental health problems ▪ Early childhood loss/separation	▪ Substance abuse within family ▪ Family instability ▪ Ongoing conflict	▪ Loss of significant family member ▪ Death, especially by suicide	▪ Family relationships characterized by warmth and belonging ▪ Adults modeling healthy lifestyle ▪ Realistic expectations
Peers			
▪ Social isolation and alienation	▪ Negative attitudes toward seeking assistance ▪ Peer modeling of maladaptive behaviours	▪ Teasing/cruelty ▪ Interpersonal loss ▪ Rejection ▪ Bullying ▪ Death, especially by suicide	▪ Interpersonal competence ▪ Healthy peer modeling ▪ Acceptance and support
School and Work			
▪ Social isolation and alienation	▪ Negative attitudes toward seeking assistance ▪ Peer modeling of maladaptive behaviours	▪ Teasing/cruelty ▪ Interpersonal loss ▪ Rejection ▪ Bullying ▪ Death, especially by suicide	▪ Interpersonal competence ▪ Healthy peer modeling ▪ Acceptance and support
Community			
▪ Community "legacy" of suicides ▪ Community marginalization ▪ Political disempowerment ▪ Economic deprivation, unemployment ▪ Isolated geographic location ▪ Lack of proper housing conditions	▪ Sensational media portrayal of suicide ▪ Access to firearms or other lethal methods	▪ High profile/celebrity death, especially by suicide ▪ Conflict with the law/incarceration	▪ Opportunities for participation ▪ Evidence of hope for the future ▪ Community self-determination and solidarity ▪ Availability of resources
Culture			
▪ Breakdown of cultural values and belief systems ▪ Loss of control over land and living conditions	▪ Negative attitude of other cultural groups		▪ Strong traditional culture

Evidence for Suicide Prevention Planning

The following information regarding evidence about suicide prevention in published literature is summarized from recent reports completed by the Alberta Heritage Foundation for Medical Research.

1. Suicide Prevention Strategies: Evidence from Systematic Reviews

Guo B., Scott A., Bowker S. (2003). *Suicide Prevention Strategies: Evidence from Systematic Reviews.*. Edmonton, Alberta: Alberta Heritage Foundation for Medical Research.

SUMMARY

- This report provides an overview of the evidence from systematic reviews on the effectiveness of suicide prevention strategies.
- Ten reviews were selected. Two reviews covered a wide range of suicide prevention strategies, three reviews focused on school-based suicide prevention programs for adolescents, four reviews assessed psychosocial and pharmacological treatments for suicidal patients, and one review examined long-term lithium treatment for patients with major affective disorders. Out of ten reviews, three reviews received a 'good' methodological quality rating.
- Suicide, parasuicide, attempted suicide, and suicide prevention were not clearly defined in the reviews. In the future, clarifying these definitions will enable one to make comparisons among the various studies.
- As the intervention strategies assessed as a means for suicide prevention in the reviews were very different from one another, direct comparisons among the interventions were not possible. In addition, a standardised approach to identify those individuals considered to be "at-risk" for suicide is needed.
- There was uncertainty and insufficient evidence as to the safety and effectiveness of school-based preventive programs for adolescents. The programs directed to the at-risk students appeared promising in terms of reduction in suicidal risk behaviours and enhancement of protective factors.
- There was insufficient evidence to make any firm recommendations about the most effective form of clinical intervention, psychosocial treatment, or pharmacological treatment for patients who deliberately self-harmed themselves. Evidence from reviews with a good methodological quality rating suggests that some types of psychosocial and pharmacological treatments including problem-solving therapy, provision of a card for emergency contact, flupenthixol treatment and dialectical behavioural therapy appeared promising in reducing rates of repeated self-harm among suicide attempters.
- Suicide is complex and multifaceted and therefore requires a combination of prevention/treatment strategies to achieve reduction in suicide rates. In recognition of the low base rate of suicide , it may not be feasible and appropriate to assess the effectiveness of a single suicide prevention strategy against a population rate reduction standard.

In the future, the following aspects should be considered when planning and developing provincial suicide prevention strategies:

- standardization of definitions for suicide-related terms;
- standardization of assessment protocols for identifying at risk populations; and
- utilization of outcome measures that have been shown to be valid and reliable for the prevention strategy of interest and the populations being targeted.

2. Efficacy of Suicide Prevention Programs for Children and Youth

Guo B. & Harstall C. (2002). *Efficacy of Suicide Prevention Programs for Children and Youth.* Edmonton, Alberta: Alberta Heritage Foundation for Medical Research.

SUMMARY

- The Canadian Association for Suicide Prevention reported in 1994 that some 70,000 to 100,000 young people per year attempted suicide to varying degrees. In 1997, suicide was the second leading cause of death for children aged 10 to 14 years and for adolescents aged 15 to 19 years.
- In response to the increase of youth suicide starting in the 1950s, numerous suicide prevention programs have been developed and expanded since the early 1970s. Although extensive attempts have been made to prevent youth suicide, there is a lack of published research on suicide prevention programs.
- Two recent systematic reviews evaluated the evidence from a large number of studies to determine the risk factors associated with youth suicidal behaviour. High rates of psychiatric illness and the presence of co-morbid mental disorders primarily characterize young people at highest risk of suicide. Risk factors for complete suicide and attempted suicide are not identical although there is substantial overlap.
- The rationale for introducing curriculum-based education programs is that the majority of suicidal youth come to the attention of their peers rather than adults. Ten primary studies and two systematic reviews were identified that evaluated school-based suicide prevention programs. No Canadian studies to determine the effectiveness of suicide prevention programs for children and youth have been published since 1991.
- The suicide prevention programs varied considerably in content, frequency, duration, and delivery making it difficult to draw general conclusions across studies. The program's objectives varied as well and even comparison of programs with similar objectives was not possible because of the dissimilarities within the programs themselves.
- Few primary studies on the efficacy/effectiveness of suicide prevention programs for children and youth were rated high for methodological quality in terms of their study design, control of confounding factors and testing of validity and reliability of the outcome measurement tools.
- Two studies using similar approaches for risk stratification provided consistent and encouraging evidence on the effects of the prevention programs in youth at high risk. These studies indicated significant changes in depression, hopelessness, stress,

anxiety and anger within the groups. One of studies found an increase in self-esteem and networks support.

- One study on suicide prevention awareness programs for the general population of students indicated a significant improvement in knowledge and attitude.
- Two studies evaluated changes in behavioural and coping strategies in the general population. One study noted lowered suicidal tendencies, improved ego identity, and coping ability with a greater effect in females. The other study identified a reduction in suicide risk, such as improved awareness of distress-coping skill, and other positive changes.
- Two studies published before 1991 indicated that harm may result when students attend a suicide prevention program. All of the primary studies since 1991, except for one, either failed to evaluate the program for harmful effects or showed that no harmful effects were found. The potential for harmful effects indicated in the one study were not verified in a follow up study.
- Most often the significant finding of change due to the prevention programs were within the groups (pre/post changes) rather than significant differences between the control and experimental groups. Thus, the overall findings of this review suggest that there is insufficient evidence to either support or not to support curriculum-based suicide prevention programs in schools.
- The generalizability of the results from these studies to the Alberta context is at question since most of the studies were conducted in the United States and their school demographics appear to be different from those in Canada.
- There is a good opportunity for the Alberta Mental Health Board to sponsor and design a good quality Canadian study in the area of suicide prevention programs for children and youth. The findings from this review may guide program evaluation and research in this province.

3. Literature Review Final Report

The following is quoted directly from: Gardiner H. & Gaida B. (2002). *Literature Review Final Report*. Edmonton, Alberta: Alberta Mental Health Board, Suicide Prevention Services. Please see the above resource for quoted references.

The Suicide Prevention Services literature review was conducted in response to the mandate of the Alberta Mental Health Board (AMHB) to "promote, preserve and restore the mental health of Albertans and work towards the prevention of mental disorders" (AMHB Business Plan, 2000, p. 3). AMHB is committed to delivering and coordinating effective services that are responsive to the needs of individuals and communities. Nowhere is this more important than in the delivery of suicide prevention services.

The rate of suicide has been internationally recognized as an important issue. "In any industrialized country the number of people dying through suicide is significantly higher than the number of people dying on the road through motor traffic accidents. In all countries without any single exception, there are resources being made available for preventive interventions but in the case of suicidal behaviour it constitutes only a very tiny faction of what is available for the prevention of motor traffic deaths" (Diekstra, 1996, p. 2). According to the 1996 Global Burden of Disease Study (Murray & Lopez), the world suicide rate is 15.1 per 100,000 with men having a suicide rate three times higher

than women. Suicide is a leading cause of death for young adults and is the second most frequent cause of death in 15 – 34 year olds (after motor vehicle accidents) in European countries. The 1995-1997 World Health Organization reports out of 22 countries Canada ranks 13th in the world per 100,000. Canada has in some remote areas of the north some of the highest suicide rates in the world. The highest provincial suicide rates are found in Alberta and Quebec. The need for appropriate preventative services is clear.

However, there are many challenges to offering effective suicide prevention services. Perhaps most important among these challenges is the lack of objective empirical evidence on what constitutes effective prevention. Simply put, the literature lacks sufficient evidence for managers and policy makers to build effective programs if they look only to empirical work.
The reasons for this state of affairs is well known. As Charlton (1992) succinctly stated

> "Suicide rates are clearly influenced by factors outside health service control such as access to an effective means of committing suicide, divorce rates and employment levels. Suicide levels may therefore reflect changes in these factors rather than the success of any health service intervention" (p. 10).

Furthermore, a number of problems consistently appear in suicide prevention research and evaluation. These include (1) problems of defining suicide, (2) deciding the appropriate source of study populations, (3) deciding the appropriate source of comparison groups, (4) retention in longitudinal research and (5) the low base rate of this phenomenon" (Frederico & Davis, 1996).
These are fundamental research issues that profoundly affect the collection of reliable and valid information such as reporting of suicide incidence. It is widely recognized that even the World Health Organization statistics do not present a complete picture of the magnitude of the suicide phenomenon due to underreporting (Diekstra, 1996).
Consequently it is not surprising that the literature consistently calls for good quality research utilizing operationalized definitions and adhering to the highest research standards (Devlin, 2001; Leenaars, 2001; Middlebrook et al, 2001;Diekstra, 1996, Frederico, & Davis, 1996). Many also acknowledge that it may be inappropriate, and perhaps impossible to apply classic positivist research standards such as those used in randomized clinical trials of drug interventions, to circumstances relevant to suicide prevention (Gunnell & Frankel, 1994; Charlton et al, 1992; Jacobs, 1988).
Therefore, those who have responsibility for service delivery are in a quandary: they must make program and service delivery decisions that may seriously impact the lives of many individuals and they must do so without the benefit of conclusive empirical evidence.

Like many jurisdictions, Alberta is attempting to prevent suicides among its population. Although Alberta has a reputation of being a leader in Suicide Prevention (Leenaars et al, 1998; Pedersen 2001), it has a number of additional challenges to overcome when considering how best to address prevention of suicide within the province. These include:

1. Historical inconsistency of a formal coordinating mechanism among regions. This has resulted in uneven service delivery despite the best efforts of Suicide Prevention Coordinators.

2. A geographically disperse population.

3. Aboriginal community needs that are complex and awareness that aboriginal bands cannot be treated as a homogeneous group.

4. The uncertain future of suicide prevention service delivery across the province.

The current literature review was undertaken at the request of the AMHB Provincial Suicide Prevention Program Coordinator in the summer of 2001 with some very specific goals in mind:

1. To determine if any suicide prevention services are known to be effective based on empirical evidence. Particular emphasis was placed on services for three at risk groups: youth, aboriginal people and rural men.

2. If empirical evidence was lacking, the goal was to determine the consensus of experts and practitioners regarding effective suicide prevention services, and

3. To learn what the literature offered with regard to appropriate program evaluation methodology and measures in the area of suicide prevention.

The above goals made the purpose of the literature review quite different from that being simultaneously undertaken by the Alberta Heritage Foundation for Medical Research on behalf of the AMHB. Although the search strategy and review process was systematic and thorough, the goal of this review was to provide useful information for the managers and front line service providers. Consequently the presentation of results is not in the traditional method of the academic literature review. Instead, results are presented as succinctly as possible with emphasis on utility for managers and service providers.

The literature review was focused on the above noted at risk populations and restricted to material which had appeared in the past 10 years (1991 – 2001) in peer review journals. In some cases older documents were included to further explore ideas presented in the 1991 – 2001 literature. In addition, the gray literature was reviewed for relevant information that might not have been published due to a number of constraints such as time, funding or privacy issues.

The literature review began in June, 2001 with the knowledge that

> "As with suicide prevention in general, the efficacy of different approaches is difficult to ascertain as rigorous evaluation is often lacking. This is not surprising given both the relatively recent recognition of suicide as a major problem in society and the methodological challenges inherent in measuring the performance of strategies whose collective aim is to prevent the occurrence of an event of low prevalence and for which there are few if any reliable indicators". (Commonwealth Department of Human Services and Health, 1995:35, p. 14)

The observation made by the Commonwealth Department of Human Services and Health holds true today: few, if any suicide prevention programs have been evaluated in a rigorous way.

Consequently there is no empirically validated model that can be used with confidence by the Alberta Mental Health Board to develop an effective program within the province. Nor is there any specific program component (for example, support groups for youth) that stands out as being objectively superior to other approaches. There are, however, service components that are widely recognized by experts as being important for inclusion in a comprehensive suicide prevention strategy. In the absence of empirical evidence this convergence of opinion has been relied upon as the best available evidence. The presentation of the components forms the bulk of this report in the results section. The service delivery components which emerged from the literature included:

a. Community Development
b. Crisis Centres and Hotlines
c. Family Support
d. Gatekeeper Training
e. Generic Skill-Building
f. Means Restriction
g. Media Education
h. School Climate
i. Organizational Policy
j. Screening
k. Suicide Awareness Education
l. Support Groups
m. System Wide Protocols
n. Treatment

In addition to the identification and subsequent operationalization of key service delivery components, the literature also revealed some themes that may aid policy and program management staff as well as front line service delivery staff to increase the effectiveness of their work. Again, these cannot be construed as "evidence" in the manner established by empirical work. Rather these are recommendations that were consistently raised by reputable researchers.

1. Use a multi-faceted approach. No single service delivery component has been shown to be effective on its own. Many voices from the literature advocate a comprehensive approach (Devlin, 2001; Hinbest, 2001; Provincial Suicide Prevention Management Committee, 1998; U.S. Department of Health and Human Services, 1992). The approach should utilize the components which consistently emerged from the literature and which have been operationally defined as part of this project

2. Focus on physician gatekeeper training. The literature is clear that a fairly high percentage of individuals who commit suicide see a health professional in the months prior to a suicide attempt. (Lewis, Hawton & Jones, 1997; Appleby et. al 1996; Aldridge, 1992). There is considerable variability in the literature of how many people see their physician before committing suicide but the range was 50 - 80% (Lewis, Hawton & Jone, 1997). Barraclough et al (1974) indicated that about half of those who commit suicide have seen a general practitioner in the four weeks before death.

   Although this strategy appears to hold a strong promise of effectiveness, it must be remembered that death by suicide is rare, occurring once in five years for the

average GP and that many patients who go on to die by suicide do not mention suicidal ideas to their GP. An appropriate screening method would have to be carefully selected for utility and physician acceptance.

3. Focus on at risk groups. Risk factors for suicide and parasuicide are fairly well known. With limited resources it is recommended that at risk groups become the primary target for prevention services.

4. Establish high standards for cultural sensitivity. Aboriginal youth have a higher than average risk for death by suicide. It is important that suicide prevention for Aboriginal groups be carefully planned utilizing a community based, holistic approach. Each Aboriginal community must be treated as distinct in its strengths, challenges and cultural sensitivities. To increase the likelihood of establishing successful and sustainable interventions when working with aboriginal groups, program planners and evaluation researchers should be willing and able to work outside of the western medical model. Also, staff should be made aware that although a medicine wheel approach is often advocated, it is not the only appropriate framework when working with aboriginal peoples. Successful strategies with aboriginal communities will require long term, sustainable, collaborative efforts between the Aboriginal people, the service providers, evaluation researchers and a variety of ministerial groups.

In addition to the four service delivery themes, the authors have included general recommendations regarding how the AMHB and the Regional Health Authorities may wish to proceed to improve suicide prevention services across the province. The recommendations also speak to the basic considerations should AMHB and the Regional Health Authorities wish to undertake an initiative to generate empirical evidence upon which to base program decisions. Some of the more important of these recommendations are:

1. The regions work together for the sake of efficiency. This is an effective and common sense approach since many of the questions to be addressed will likely be common to all regions.

2. A longitudinal approach be utilized. Sufficient time will need to be provided to see results emerge. Depending on the approach taken "sufficient time" may be anywhere from three to ten years. This is particularly true when implementing a holistic approach to suicide prevention.

3. Sufficient, sustainable funding should be developed and placed into a protected envelope in order to carry out the longitudinal work necessary to allow results to emerge and to attract well-qualified staff to the research work. External funding sources are available for research of this nature.

4. Political will must allow for interministery cooperation on issues which emerge as being relevant to suicide rates.

5. When contracting third party researchers or evaluators to manage the design, implementation and/or evaluate the work, ensure that they are highly skilled in prevention projects. It is critical that the individuals be both appropriately trained in academic research standards (applied research design, qualitative and

quantitative methodologies) and have practical experience in carrying out complex research in culturally diverse community settings. Due to the longitudinal requirements of the research and evaluation work as well as the necessity for strong community ties in order to ensure success of any research or evaluation efforts, the individuals should be Albertans with a proven track record of community work.

The Alberta Mental Health Board and Regional Health Authorities will be taking on a leadership role if they attempt to develop an objectively effective suicide prevention program. The lack of empirical evidence in such a large literature should serve as a warning sign that perhaps it is not possible to evaluate Suicide Prevention program effectiveness in the most intuitively appealing manner: the reduction of suicides across the province or in regions. As Hinbest (2001) pointed out

> "suicide is such a low base-rate phenomenon it would be unfair to either blame a program for any suicides that occurred in a community in the short term or to take credit for outcomes that more properly reflects a wide range of community endeavors, commitments and actions of which the suicide prevention projects were one part."

This is not to suggest that Alberta might not be able to succeed in designing objective evaluation procedures for suicide prevention where others have failed. Alberta has some unique advantages, including the fact that services are developed and delivered regionally but linked provincially for the purposes of information sharing.

If AMHB and the Regional Health Authorities are able to objectively evaluate suicide prevention programs or components in such a way that some components emerge as superior to others, it is certain that the international mental health community will be interested in the results. This would be particularly true if the evaluation research focuses on suicide behaviour change and cost/benefit outcomes.

National and Provincial/State Suicide Prevention Strategies Evaluation Frameworks

Note : Only those countries/states/provinces that have addressed evaluation and/or performance measurement in an active way have been included.

Country/State	Strategy	Evaluation Methodology	Results	Critical Appraisal
New Zealand	New Zealand Youth Suicide Prevention Strategy (1998) KiaPiki te Ora o te Taitamariki (specific Strategy for Maori youth "In our Hands") (1998)	Phase I Evaluation complete • occurred 5 years into implementation of strategy • evaluation of effectiveness • Phase I will inform Phase II evaluation • qualitative methodology using emergent theme approach to: → articulate realistic outcomes for evaluating the Strategy → outline how implementation of the Strategy has occurred → present stakeholders perceptions of the Strategy's impact and usefulness • 62 participants (key stakeholders from government and non-government organizations) • face-to-face individual interviews with a small # of telephone interviews and/or group face-to-face Phase II report will be completed by July 2004, and will involve more in-depth study on key findings of interest that emerged from Phase I	• various commendations such as: → Strategy being evidence-based with a separate strategy for Maori which supported a partnership approach → perception of broader ownership of Strategy across sectors with a collective focus → development of guidelines for schools and primary care providers • used Strategy primarily as reference tool for teaching and developing training workshops • particularly important for best practice principles • new initiatives were undertaken in direct response to strategy • Barriers were identified including: → planning should have been done prior to Strategy's release about how goals would be achieved as there was a perceived inadequacy of planned implementation → insufficient communication planning (mail-out should have been followed up with information tailored to different audiences with more use of facilitated sessions) → lack of funding as dollars for initiatives came out of agency baselines which resulted in competing priorities → there was an absence of a government model for collaborative practice	• only those stakeholders involved in Strategy development and had a high level of influence on its implementation, or key organizations that were expected to respond to the Strategy were interviewed which may have resulted in some bias • in one part of paper n=62 while in another part of paper n=58 • data was in writing with quotes paraphrased rather than tapes which may leave room for error • no anonymity of participants • there were some comments about suicide rates declining from 1996 (156) to 2000 (96) but recognized that the reasons for this are multi-causal and cannot be attributed to Strategy alone • it was recognized in the report that although there was an increased understanding of suicide prevention there was a lack of information on intervention effectiveness • ***Currently waiting on information pertaining to***

			→ lack of accountability measures limited responsiveness of organizations to Strategy • the accompanying Maori strategy (In Our Hands) created confusion as it was not clear how to implement the two Strategies together which was the goal, and hence the Strategies tended to be implemented separately or only one was implemented (Maori strategy did not include risk identification and treatment)	***Phase II from Ruth Apolinario (011-64-4-918-9527) and tania.stanton005 @msd.govt.nz***
United States	National Strategy for Suicide Prevention (2001)	• currently not formally evaluating Strategy but rather identifying and developing indicators to quantify achievement of all 68 objectives • working to identify sources of information for each recommended indicator and to establish feasibility/practicality for using the indicator • where no true indicator exists, "proxy measures" will be identified • indicators are being identified and developed through the process of soliciting input from a broad range of knowledgeable people about their knowledge of possible measures for each objective • one mechanism that indicator development project is using is to solicit information through a web-site	In progress	• ***Currently waiting on information from Marisa Prosser, NSSPI Coordinator 617-618-2703*** • performance measurement rather than evaluation • web-site for indicator development (www.nsspi.org/about.asp)

	State Plans	• Texas (2002), Minnesota (2003), Nebraska (2003) and Wyoming (2002) all have suicide prevention plans related to the National Strategy but no documented evaluation frameworks • Rhode Island has identified public surveillance as a tool to identify where problems are, who is affected, and where programmatic and prevention activities should be directed		
England	National Suicide Prevention Strategy for England (2002)	• *Annual Report on Progress (2004)* and *Annual Report on Progress (2003)* have been released; however, these are not evaluations but rather reports on actions • focus on indicators such as decrease suicides in various populations with a general decrease of 20% by 2010; decreased suicides as a result of various methods; promotion of mental health in various categories of excluded and deprived populations • use 3-year pooled rates to avoid year-on-year fluctuations • developed a *National Confidential Inquiry into Suicide and Homicide by People with Mental Illness* to help trend indicators • have an objective to evaluate	Strategy's target is to reduce the death rate from a baseline rate of 9.2 deaths per 100,000 population in 1995/6/7 to 7.4 deaths per 100,000 population in 2009/10/11. Data available for 2001-2003 shows a rate of 8.6 deaths per 100,000 population - a reduction of 6 per cent from the baseline.)	Performance measurement rather than evaluation

		the National Suicide prevention Strategy, but this is just to include a strategy meeting regularly to assess progress with an annual update of actions		
Australia	National Youth Suicide Prevention Strategy (1997) (NYSPS)	• Summative Evaluation of Strategy was conducted in 2000 by the Australian Institute of Family Studies for Strategy 1995-1999 with a focus on appropriateness and where possible effectiveness to: → determine extent to which NYSPS achieved impacts or outputs directly related to its stated goals → determine extent to which NYSPS initiated activities appropriate to the achievement of objectives directly associated with stated goals → document the main lessons learned through the experience of implementing a nationally coordinated approach to prevention of youth suicide → identify findings to inform the government on future national youth suicide prevention policy development • evaluation used Public Health Approach (outcomes:	• Strategy initiated many activities appropriate to achievement of objectives, and range of activities were comprehensive from nearly all prevention approaches that have been identified as necessary from the research literature • Strategy not considered fully coordinated national strategy but rather phase of developmental research as it will need to be followed by a phase in which promising interventions are widely implemented throughout service systems and communities throughout the nation • there is evidence from program evaluations demonstrating complexity of causal factors and evaluations have been expanded to look at effectiveness of various interventions • no data related to associating Strategy with significant outcome at a population level nor positive changes in individual or environmental risk and protective factors at population level although a number of projects did demonstrate positive outcomes for young people and significant impacts on target groups participating in trial programs • evidence of a higher level of awareness about issues related to youth suicide prevention throughout the service system • 5 major themes emerged related to good practice findings including: → value of multidimensional approach	• some design issues included: → short time since initiation of Strategy → problems with reliability of suicide statistics as indicators for achievement of Strategy (eg. under-reporting; varying data collection procedures) → absence of intermediate measurable objectives (should have included incidence and prevalence of risk and protective factors and system level policies, structures, standards, skills and knowledge) → lack of baseline data for intermediate indicators prior to initiation of Strategy → confounding factors eg. related programs (control group not possible; longitudinal study premature) → lack of rigorous qualitative methodology

		changes in health and well-being, impacts: changes in modifiable risk and protective factors; and processes: changes in service and program delivery systems) and Program Logic (to guide design) • naturalistic inquiry and phenomenological methods (including discovery of unanticipated impacts) • **main source of data was individual evaluations of programs** • the following components were included in the evaluation: → description of Strategy (goals, objectives, principles, processes, outputs) → context of Strategy (history, policy, scope of problem, evidence in literature) → an examination of extent to which Strategy was appropriate to achievement of goals and objectives (evidence base, broader policy context, barriers and facilitators, sustainability and generalizability) → identification of gaps and issues → documentation about what has been learned about good practice → recommendations for	with attention to full spectrum of interventions in various services with whole populations and at risk sub-populations and individuals → access including universal and selective targeting, flexibility with selection criteria and referral, delivery in multiple community-based settings, and having multiple "soft" entry points → engagement in that service providers need to develop better knowledge of adolescent developmental health issues and skills in challenging negative assumptions about young people's culture and assertive follow-up is critical → effective intervention was particularly problematic – interventions must address protective factors as well as risk factors across the full spectrum of interventions; addressing all the systems impacting on young people's health and well-being was a challenge that proved difficult for individual projects to meet → building capacity of existing services and programs more effective than creating new structures; capacity building efforts also need to be multidimensional and genuine collaboration between sectors is essential with shared goals and modified organizational structures and processes, therefore needs senior management to be on side • convergence between suicide prevention and mental health promotion including both needing multidimensional	

		future directions • 5 main methods used to collect data → qualitative meta-analysis of project evaluation reports (44 demonstration projects funded under the Strategy) → survey of key stakeholders → informal consultation with key stakeholders → review of research and practice literature → review of policy and program context • evaluation reports varied in quality with a wide range of methods used but most were descriptive and qualitative with only a few controlled designs – common themes identified using analysis of program logic as framework for content analysis • survey targeted area directors, divisions of general practice, non-governmental bodies in a variety of sectors, indigenous organizations, and professional associations → not all necessarily involved in the Strategy but whose active involvement will be important if Strategy is to be extended survey explored → stakeholders' perceptions regarding	approaches and interventions with active involvement of multiple sectors of government and community and consumer involvement • future directions include developing learning organizations to ensure that organizations place quality improvement at the center of its concern; and creation of systematic policy frameworks capable of supporting intersectoral partnerships and developing social capital • recommendations to inform future efforts in suicide prevention include: → initiatives should address general population and all vulnerable groups but also include a major focus on special populations that have been identified as at risk and experience additional barriers to access such as young people and Aboriginal people and rural remote locations → future initiatives should be guided by good practice principles including multidimensional approach with selective and universal targeting; accessibility of services and engagement for marginalized and hard to reach populations; basing programs on evidence about risk and protective factors, evaluation of program efficacy and practice-based evidence of program effectiveness; and building capacity in all levels of service system → improve data in indigenous population → recommendations around parenting and school-based programs including intersectoral collaboration; implementing coordinating bodies to ensure programs are	

		progress towards population health outcomes and impacts and changes in service systems and whether they had improved or worsened in time period of Strategy → for each group of indicators related to major prevention approaches, asked to indicate extent to which they believed Strategy had contributed to changes they perceived as having taken place → 300 questionnaires filled out with 151 returned (50% response rate) and 143 entered and analyzed • consultation with key stakeholders was informal and happened in a variety of ways such as conferences, workshops, meetings, and with practitioners working in the field • qualitative meta-analysis of projects reviewed by a number of people • developed a *National Stockade of Programs and Activities in Youth Suicide Prevention* with a total of 919 projects, but projects are inclusive of a wide range of activities not restricted exclusively to youth suicide prevention	comprehensive, coordinated and complementary; including research priorities such as indigenous and non-English speaking people, effectiveness of volunteer and paraprofessional home visiting programs, and programs for children of parents with mental disorders; professional development in partnership activities in schools; curriculum sensitivity to cultural and social diversity; linkages to primary prevention and early intervention programs; and development of structures and processes that support the active involvement of teachers, students, parents and community members such as democratic decision-making and participatory action research → networks aimed at enhancing identification of young people at risk providing support and facilitating access; networks should have multi-sectoral membership, formal referral protocols, join planning and formal coordination → emergency departments should work in partnership with mental health services and community to develop protocols for those presenting with suicide attempts including triage rating systems, prompt mental health assessments by qualified staff, formal referral for ongoing are with appointments 24-48 hours after discharge, ongoing careplans in collaboration with client and care-giver, and assertive follow-up → develop a minimum data set for ER departments with a module on	

		→ Stockade questionnaire distributed through a number of channels (mailing list) and info received was entered into a database → purpose was to identify diverse range of activities that respondents felt were relevant to youth suicide prevention → qualitative nature of the activities was just as important as the quantity of activities → information from this Stockade used to provide a context for the appropriateness of Strategy activities	management of suicide attempts and deliberate self-harm; and develop a nationally agreed multidisciplinary set of clinical guidelines or standards → expand range and quality of primary health care services available for young people at risk eg. community-based youth health services, multi-purpose youth services, and GP Mental Health Shared Care → work collaboratively to identify and advance promising models of primary health care for Aboriginal youth → expand telephone counseling services with systematic referral and follow-up for young people and ongoing professional development of telephone counseling staff → collaboratively expand capacity of youth health services to provide for those affected by multiple risk factors → fund a program of service development research aimed at engaging marginalized and alienated young people including exploring involvement of family, staff well-being, collaboration, and enhancing quality assurance and evaluation → develop policy frameworks for mental health services for young people with special consideration to engagement of young males, dual diagnosis and collaboration between mental health and drug and alcohol services, early intervention/promotion/ and primary prevention capacity building; and capacity building in evaluation → fund a research program focusing on evaluation of effectiveness of youth specific service models;	

			development of valid indicators of accessibility and engagement; efficacy and effectiveness of treatment for specific disorders in young people such as depression, anxiety, and substance misuse with evaluation focusing on monitoring long-term outcomes; pathways to mental health care; and attributes of a safe and effective termination process → recommendations related to decreasing access to means including car exhaust recommendations, firearms, railways and jumping from heights, and hanging (see full text article) → ensure programs have access to resources for evaluation of program effectiveness (eg. evaluation and research support units, training, expansion of national surveys) → all regions should develop a Area/Regional Mental Health Evaluation and Service Development Research Strategy → develop communications strategies to enhance intersectoral collaboration focusing on transforming information to knowledge that meets practical needs of users → enhanced training for professionals in area of suicide prevention with research and evaluation related to the training → governments should identify mechanisms to enhance consistency and complementarity of policies relevant to the well-being of young people across all relevant	

			departments → enhance community development activities and programs including the supporting of the participation of young people → conduct policy research to identify frameworks and mechanisms best suited to supporting structural community development and local control over resource utilization → any community development aimed at improving the health of indigenous people should work with state and national agreements	
Finland	National Suicide Prevention Program (1993) • Research1987-88 (studies suicides committed in course of one year psychological autopsy) • Planning 1989-91 • implementation 1992-96 • Evaluation 1996-97	• project implementation was a goal-oriented action process so events would be initiated that would affect the chains of factors which may either trigger a suicide or protect against it • aim of Program was to lower suicide rate by 20% in 10 years through intermediate objectives • evaluation included: → Internal Evaluation by National Research and Development Institute (STAKES project team) looking at planning, process of implementation and functional impact or outcomes – evaluates the Project from the viewpoint of the persons implementing it and contributing to it as experts	***Internal Evaluation*** • response rate to questionnaires 70% • 50% (N=1693) responded that project had somewhat or greatly improved understanding of suicidal risk factors, enhanced multisectoral cooperation in suicide prevention, and improved recognition of need and respect for suicide prevention • suicide prevention was activated and prevention methods had been developed at workplaces • project implemented in a multi-focused multisectoral and multiprofessional way • majority of respondents regarded key activities as relatively successful • 70% (n=711) reported that activities had become stabilized, and 90% of contact persons and 82% of others (n=674 and 958 respectively) estimated that their unit was able to play at least some role in suicide prevention • bulk of the development work was directed at the theme of life crisis and young people	• 190 page Internal Evaluation Report available • gives merit to having both internal process evaluations and larger external evaluations • difficult to critically appraise with information provided but international researchers were involved • lack of comprehensive information on methodology • conclusions from findings often based on estimates • methodology leaves a lot to be desired (p. 174 of evaluation report) • were the achievements resulting from the project actually accomplished by it or the result of a cumulative effect?

		→ Internal Evaluation by National Public Health Institute looking at effectiveness and changes in suicide mortality → External Evaluation by Ministry of Social Affairs and health looking at strategy, methods, and impacts • plan for evaluation was for 3 different perspectives: overall project, subprojects, and local activities • implementation evaluation focused on processes – how the program achieved what it did and interpreting outcomes in order to inform others about key learnings ***Internal Evaluation*** • questions included: → Was the Strategy realized as planned? → Were the approach and methods suitable and effective? → Did the program have appropriate content and topics? → Were the service sectors mobilized and activated? → Was the expertise of various professions combined and utilized? → Were preventative activities evolved across the country? → What were the interim outcomes?	• project was implemented throughout the country both geographically and sectorally ***External Evaluation*** • suicide figures in Finland increased during the first years of the project to a peak in 1990 followed by a reduction of 20% between 1991 and 1996 during the implementation phase, and finally dropped to 9% below the initial level • implementation covered broad public sectors throughout the country • interactive models of health promotion were developed and guidebooks were published • organizations and professionals in the social service have been influenced but not as much in the health sector • anchoring of ideas in local government administrations and professional organizations was weak which may have threatened the survival of some project ideas • more attention could have been given to suicides among the elderly and to the restriction of access to means • still remains a gap between medical paradigms and sociocultural paradigms in understanding and preventing suicidal behavior	

		→ What were the experiences of those involved? → What help was the national project to those responsible for suicide prevention? • objectives of evaluating local activities included: → realization of Strategy in practice → focuses, methods, and volume of suicide prevention work → how prevention was organized and carried out at workplaces → difficulties in starting activities → specific features of professions and service sectors involved → interim outcomes such as the development of action models and methods → continuation of suicide prevention after the project → experiences and feelings of those involved → feedback to national project • extensive nationwide inquiry in 1993 via questionnaire that also had a call to join a contact network with 1200 responses that agreed to join network • 1996 a national survey was sent to 2500 professionals		

		across the country (police, rescue, military, church, schools, employment offices, citizen organizations and social and health care agencies) which included 18 pages with over 50 topics covering the above objective themes • ½ were in network and the other ½ were matched by sector and workplace therefore ½ addressed to individual and ½ to unit or organization • in addition, 200 local projects questioned re: what has happened, what strategies have been used, how have goals changed • selected projects of the 20 subprojects of National Strategy were also evaluated by stepwise model (development, product, local diffusion, local outcomes, general usefulness and applicability) using open-structured interviews, questionnaires and focus groups ***External Evaluation*** • program externally evaluated by international expert peer group • process evaluation approach was used first ever research based nationwide program in the world • main goal of external		

		evaluation was to "produce an overall estimation of the project as a societal action strategy, concentrating especially on its purposefulness, appropriateness and results, and evaluating the usefulness of the project strategy in Finland and internationally" • seven main questions were asked: 1. Have the original targets of the projects been reached? 2. What are the areas where the project has succeeded and produced useful information? 3. Have the resources of the project been sufficient and effectively used? 4. Has a public image of the project been formed tat either benefits or hampers suicide prevention? 5. What could be learned from the project when considering similar nationwide development programs elsewhere? 6. In continuation, which are the most important questions to be considered in suicide prevention? • methodology included: → interviewing 32 persons		

		representing workers in the program as well as users and outsiders including critics → a questionnaire on aims, strategies, and evaluations that was distributed and answered by 48 key persons in the service and health sectors → study of an internal evaluation by people who had worked in and for the project → study of reports used		
Norway	The Norwegian Plan for Suicide Prevention (1994-1999)	• Plan completed in 1999 after 6 years of activity • Action Plan was evaluated → evaluation did not focus on examining effects of Plan on suicide rates but rather to assess the degree to which the four objectives of the action plan were met and on the implementation and strategies employed • the 4 objectives were: → to establish a national and three regional resource communities → to stimulate more systematic research → to initiate systematic knowledge distribution → to operate information activities • Plan primarily focused on measures aimed at	• 4 objectives were met • suicide survivors are one group that needs more attention therefore in the next years efforts will be concentrated on developing and supporting the new Norwegian Organization for Suicide Survivors (LEVE) • the issue of suicide among gays and lesbians also noted to need attention along with elderly men and young people, and occupational groups at risk • the Plan did not prioritize suicide prevention through physical or legal restrictions on access to means of suicide which should be addressed • the Plan also did not have much to say on a proactive information strategy but it was recognized as a high priority and *Suicidologi* magazine was launched • 4 small centers were established at 4 universities • resource communities were established at different points in time i.e. National	• methodology not available but has been requested

		enhancing programs for particular risk groups such as through acquiring new knowledge, distributing knowledge through education and information activities, and giving advice and counseling to professional groups on clinical and preventative projects	Suicide Research and Prevention Unit, regional center in 3 cities • activity levels at centers have been high and well targeted • National Plan has triggered research with greater thematic range (went up from 10 projects from 1990- 93 involving 20 researchers to 33 projects from 1997-2000 involving 47 researchers • thematic turn from epidemiological studies with psychiatric basis to evaluation of effects of treatment • research on suicides among young persons has gained a prominent place • academic background of research now more interdisciplinary and cooperation among research communities has been achieved • more international cooperation projects • in relation to knowledge distribution, teaching aids and teaching programs were developed for professional groups that encounter those with suicidal tendencies eg. teachers • distribution of knowledge highly successful but highly demanding on resources • campaign to include suicidology in university curricula successful in medical and psychology studies and some teaching, nursing and social work colleges • placing a health topic on curricula of colleges faces a major challenge – each institution has to be addressed separately which is demanding on resources with a fairly modest result compared to efforts expended – may have been more efficacious and efficient if Ministries of Health and	

			Education had been involved • "Living Works" (Alberta) is special intervention course taught to professionals and evaluation concluded it is a good "first-aid" course and is cost-effective • most effective in the Norwegian Plan in terms of result attainment were the information activities – the national information strategy included a wide range of techniques including internet presentations, brochures and media to impart info on courses, conferences, and research • 2 Commendations were: → excellent planning document (Project Plan) which guided the work → establishment of resource communities – require active assistance	
Canada - Quebec	Quebec's Strategy for Preventing Suicide (1998)	• implementation indicators were developed for 7 objectives of Strategy • used a pluralist model of evaluation including focus groups to look at the following questions: 1. Overall, how have the actions been implemented and if not, how can they be implanted to maximize effects? 2. What interventions characterized the implementation? 3. Why would we not use a strategy identified and what would we use to	• 330 participants in focus groups (225 regional; 75 national) including individuals from regional committees for prevention of suicide, regional health authorities, suicide prevention centres, crisis centres, community agencies, support networks, clinics, hospitals, police, ambulance, youth centres, educational institutions, correction services, professional associations, Ministries, and other provincial groups influenced by the Strategy • findings included: → telephone support and crisis centers reinforced action strategy → there was not enough focus on populations at risk with too much focus on the general population → Strategy resulted in the subject of	*Contact: Charles Cardinal (Contact Gayle Vincent for number)* Limitations identified in report include participants thinking they had to impose judgment. In a consultation this large one has to assume that the varied expressed opinions are true and relevant.

		replace it? 4. What were the difficulties in implementing and what factors facilitated the implementation? 5. How did clients access the services? <u>Objective 1:</u> Provide and consolidate essential services and put end to isolation of caseworkers → existence of regional plan for integrated suicide prevention that stipulates who does what → existence of coordinated mechanisms (protocols and agreements) → % population with access to hotline → support given to caseworkers and effectiveness of actions taken → assessment by regions of follow-up required <u>Objective 2:</u> Increase professional skills → % general practitioners by region who receive training in diagnosis of depression and its signs → % caseworkers who receive training in identification of depressions, associated disorders and their signs	suicide remaining in the political spotlight → crisis and suicide prevention service doing well but gaps in primary prevention and education of doctors and hospital staff • recommendations included: → The Minister should establish clear priorities and objectives to bring forward a new plan of action. → Provide adequate resources to regions. → Establish indicators for all regions. → Educate and mobilize doctors and hospitals to help increase involvement in prevention. → Develop an underlying vision of expertise so that everyone is educated and aware of suicide prevention. → Arrange and continue services to those suffering from neurological problems. → Discover and close gaps in public information on suicide.	

		→ % caseworkers who receive training in dealing with suicidal individuals, the people among them and people in mourning as a result of suicide Objective 3: Intervene with groups at risk → # of plans accepted and implemented → type of people the projects reached Objective 4: Foster promotion-prevention programs among young people → existence of regional response team able to work in schools in cases of suicide and attempted suicide Objective 5: Reduce access to and minimize risks associated with the means of suicide → % police officers aware of legislative provisions that allow them to seize firearms → % caseworkers in the health and social services network aware of procedures to follow when there is a firearm in the home of a suicidal person → regional evaluation of the implementation of a strategy for recuperating strong medications left in the home after a death or		

		disease Objective 6: Counteract the trivialization and the sensationalization of suicide by developing a sense of community and responsibility Objective 7: Intensify and diversify research → annual budget for research on suicide set aside by funding agencies • in addition to these implementation indicators, effects of actions taken on suicidal behavior and whether objectives were reached have been completed (waiting for info) • these measures would include: → mortality rates for death by suicide by sex and age → breakdown of the suicide rate by instruments used → attempted suicide rate estimated by Enquete Sante Quebec → hospitalization rate following attempted suicide, by sex and age		
Canada - New Brunswick	Provincial Suicide Prevention Plan (1995)	• no evaluation of this Plan was planned or completed; suicide rate over the past decade has been constant • current research being done by team from Montreal	• some preliminary finding of research include: → men succeed more → seek for help varies from none to exhaustive → most common underlying disorder is	***Contact: Andree Guy*** ***andree.guy@gnb.ca*** 506-444-5241

		studying past 14 months completed and attempted suicides in New Brunswick • preliminary results due out in Fall 2004 focusing on seeking for help patterns, life trajectories, and underlying mental health disorders (use of SCHID 1 and 2 and interviews with families) • recommendations coming out of this research will direct how Suicide prevention Plan is refocused and revised	alcohol abuse at 95%, therefore recommendations will include strategies to address dual diagnosis → variety of other underlying disorders, but mainly substance abuse and depression, both of which are most often related	
Canada – British Columbia	Putting Best Practices into Action (Youth Suicide Prevention Project) (1999-2000)	• cluster participatory evaluation of 7 participating communities functioning as demonstration sites • evaluation participatory in that there was community input into the research process and each community was different • cluster evaluation assesses progress, outcomes, and impacts of broad programming initiatives that have varied implementation in different sites and recognizes how communities differ in their needs and capabilities and includes: → assessing capacity of projects to achieve desired results → identifying situational factors and variations in strategy that enhance or decrease achievement of desired results → assesses impacts of	• 7 participating communities implemented at least four of the fifteen best practices • over 40 diverse implementations of best practice strategies were implemented • close to 6,000 youths impacted by initiative • all projects ended up doing most of the activities originally envisioned but some additional activities that grew out of collaborative processes and ongoing reflection on goals • summary of key activities in each of the 7 communities is available • key learnings related to each of the best practice strategies were identified and are available and include such things as addressing resiliency in generic skill building; older students involved in generic skill building or peer helping provide energy, hands on interaction, and legitimacy; suicide awareness education supports gatekeeper training and protocol development (more detail available in report) • conditions for supporting successful implementation include adequate time,	Respectable organization doing evaluation. Participatory cluster evaluation interesting and worthwhile looking into more. Important to pay particular attention to the comparison between their 15 best practices and the 14 components and how we might integrate their key learnings into the Alberta Strategy.

		groups of strategies including intended and unintended outcomes → contributes to learnings about complex and diverse implementations • goal of cluster evaluation is organizational learning and is stakeholder and practitioner driven with external evaluators functioning as coaches and facilitators who brings methodological and conceptual tools to the evaluation achieved in this project by: → conducting workshops that dealt with defining project activities, dealing with challenges and evaluation → developing a web-site for information sharing relevant to implementation and evaluation activities → playing a liaison role between communities and the larger picture and contributing to discussions → multiple site visits by evaluator to discuss implementation and evaluation activities and to conduct interviews, review data collection instruments, and assist with data-entry and analysis • wide range of data collection	resources for hiring appropriate help, partnerships, buy-in, and leadership • other important learnings on process were: → balance planning and flexibility so that project can take advantage of unanticipated opportunities → continuity of project leadership and vision communicated by that leadership played a major role in the success of project implementations → external funding provided legitimacy and reinforced efforts at external fundraising → linking to other prevention efforts is essential where ever possible as other communities can offer innovative examples and insights concerning implementation challenges and solutions → multiple strategy approach benefited communities but also provided the greatest challenges so future efforts need to use a phased in approach in order to avoid burn-out; and use successive strategies as building blocks for an overall long-term strategy → learnings on increasing visibility and sustainability • broad conclusions include; → the one-year timeframe being too short → small seed investment can have a strong impact and legitimate local activities → turnover of staff contributes to burn-out and challenges	

		instruments ranging from community to community • follow-up interviews with over 40 people including project coordinators, committee members, project participants, and youth group discussions on site with steering and implementation committees and youth volunteers and participants • early on in implementation a one day workshop was held covering evaluation and research • summative evaluation is premature and not realistic to introduce concrete final outcome measures such as reduction in youth suicide as project short-term and it would be extremely difficult to attribute positive or negative changes to the projects • formative evaluation goals at forefront documenting activities being implemented and developing information that could improve implementation • methods included structured interview schedules, questionnaires, focus group sessions, in-depth informant interviews all conducted on site by project leads and by the evaluator and by telephone as follow-up to project • over 60 interviews were conducted with key	continuity → stable committees with wide representation and realistic planning goals recommended → as picture grew larger, number of pieces increased and so the impact of participation was the implementation of activities far beyond the scope of initial goals → post-training surveys of peer helpers, those taking gate-keeper training and others involved in projects showed high levels of satisfaction and indicated clear increases in knowledge and changes in attitudes towards helping those at risk of suicide → hands on and practical side of training rated highly immediately after training and on follow-up → multiple best practice strategy approach embraced and a concern because of short timeline; however, activities served to support one another in many ways → value to linking suicide prevention efforts with other concurrent community development and prevention activities with higher probability of long-term sustainability → power of simply bringing youth suicide into the open as a topic appropriate for public discussion; reduces tensions, facilitates communication, and helps young people get the help they need • report concludes with discussion on future	

		informants across the province • community required to match funds were the best practice strategies planned and implemented? • 15 best practice strategies identified which match to 14 components except that component 2 (crisis centers/hotlines) and 14 (treatment/postvention) not identified as best practice strategies and peer helping and youth participation identified as best practice strategies but not components although could fit into other categories • funding awards for demonstration sites ranged from $10,500-$40,000 over a one-year implementation schedule and each participating community was required to match funds	options and priorities including: → continuing with seed funding approach → supporting local control over gatekeeper training → respecting First Nations' community-based approaches → larger timeframes → clear leadership roles in projects for appropriate school representatives → find ways to maximize continuity of Vision → clarify how multi-strategy approach might look in implementation, especially related to timelines → access to training in community development → targeting best practice strategies that were not previously targeted such as means restriction → address effectiveness issues with efforts at charting prevalence of suicidal behaviour in these communities → remove some of the research and evaluation responsibility from sites as perceived as onerous	
Canada – Research Article	Canadian experience of evaluative research on Youth driven suicide programs	• review of evaluative research on suicide intervention and prevention programs for young people in Canada • comprehensive search completed for published and unpublished research reports of evaluated suicide programs for Canadian youths aged 10-24	• less than one youth suicide program was evaluated per year in Canada over three decades which leads one to believe that suicide program evaluation in Canada is underdeveloped • focus on primary prevention (all youth in general or subpopulations at risk) • 15 suicide intervention and prevention programs for youths were evaluated in Canada from 1970-1996 • 1 pan-Canadian on gun control, 2 in Alberta, and 12 in Quebec • most studies were quasi-experimental	• evaluated suicide programs represent only a small portion of suicide programs in Canada ** most evaluations took place in Quebec that is the only province where a non-profit provincial association supports collaboration between program officials and researchers through regional and provincial meetings • the fact that none of these programs formulated a

			(12) • information on psychometric qualities of measures was scarce • 6 led to an improvement in knowledge of suicide, 1 to an improvement in attitudes and 3 to improvements in skills required to intervene in suicide process • results of gun control study was inconclusive • description of programs incomplete and theoretical bases never presented • most common strategies were school-based education on suicide and gatekeeper training • most programs were in school environment	theory of suicide might explain why choice of risk factors targeted departed from findings of risk studies (mental health disorders and family psychopathology associated with youth suicide not targeted)
Canada – Research Article		•	• evaluation research dealt exclusively with program effects with 3 looking at implementation and 3 at structure • need theoretical model of suicidal behavior in order to rationalize targeting one risk factor over another • 1989 and 1993 evaluation of suicide prevention in Alberta showed weaknesses of poor level of funding and lack of support for local programs and research with little support from physicians – however, knowledge increased and intervention skills improved	• this article recommends therefore that program planning be guided by a theory of suicide (this should be an indicator of appropriateness) • because suicide is multifactoral, a theory of suicide should be defined for each program according to context

Implications

1. Evaluation of Alberta Strategy should include:

Short-term Indicators

- → short-term implementation indicators (influence of variation, processes, and environment on implementation of Strategy)
- → analysis of short-term effects on health outcomes

Intermediate Indicators

- → strategic analysis – appropriateness of acting on problem
- → intermediate implementation analysis (influence of variation, processes, and environment on implementation of Strategy)
- → outcome implementation indicators (program analysis) – did the Strategy meet goals and objectives
- → analysis of performance – links between resources used and effects obtained
- → productivity analysis –ability of resources to meet services implemented

Long-term Indicators

- → ongoing long-term health outcome indicators using population surveillance to look at various rates – did Strategy have desired effects on health conditions

2. A theoretical framework of suicide prevention needs to be articulated and presented as part of the Strategy.

3. Objectives should be measurable.

4. A balanced combination of universal and selective strategies should be implemented. Multiple strategies have been deemed more effective.

5. Data collection reliability problems leads one to assume that suicide statistics not enough to examine achievement and effectiveness of Strategy.

6. A participatory cluster evaluation should be considered if the strategy includes community projects to implement any combination of the 14 components.

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